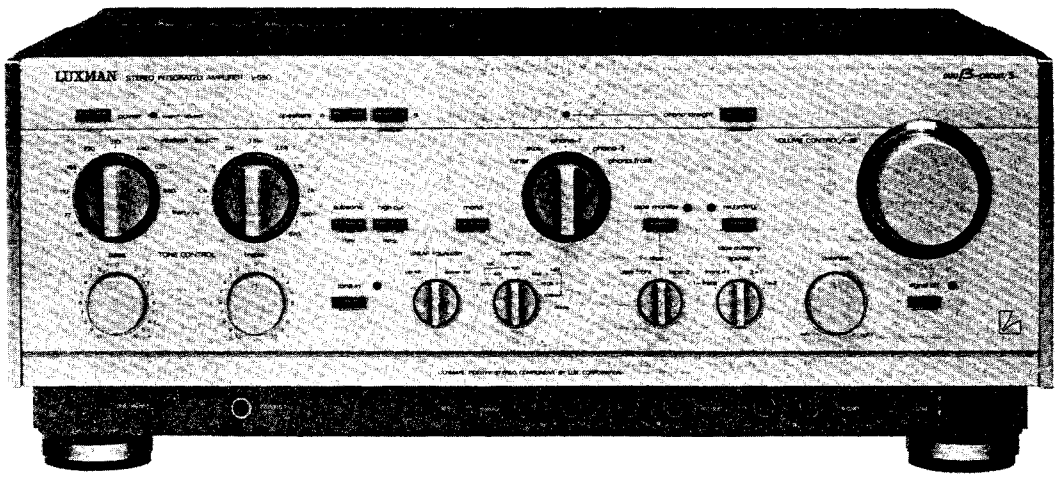
# SERVICE MANUAL

## Duo-Beta Circuit/S
## Stereo Integrated Amplifier L-550

### Pure ClassA



L-550

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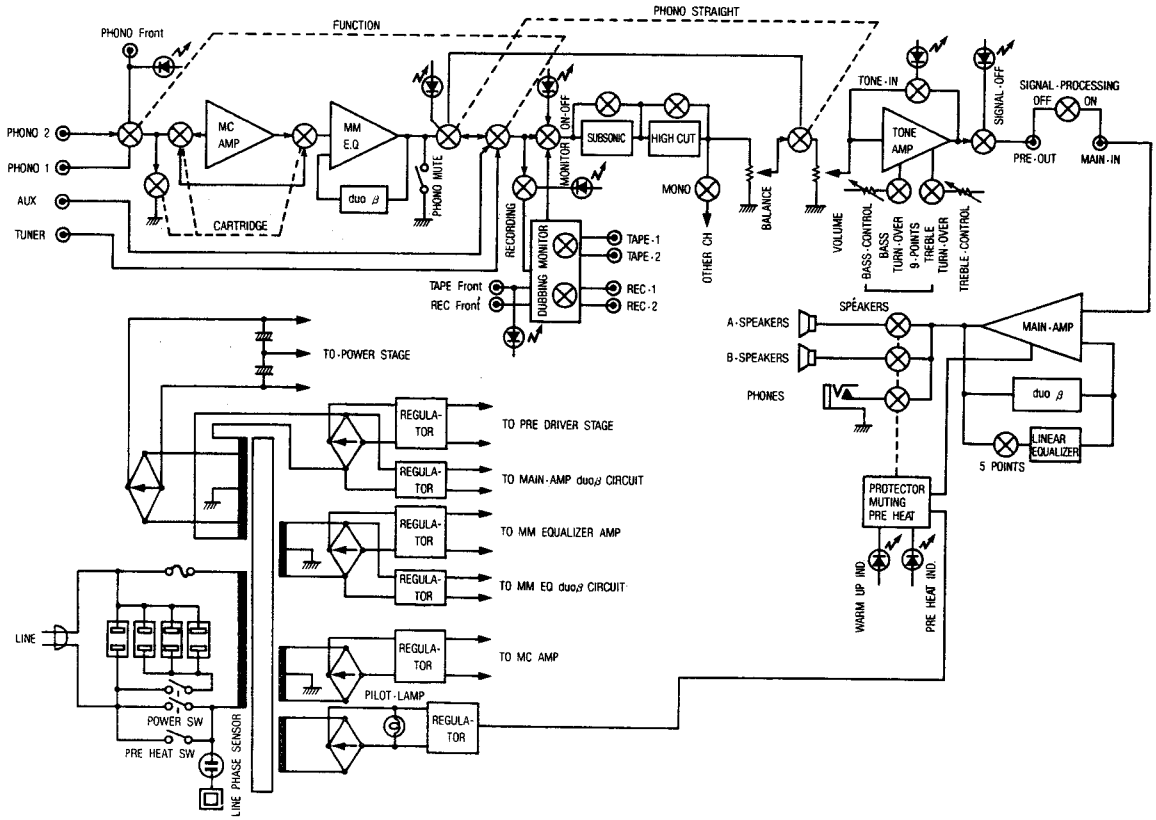
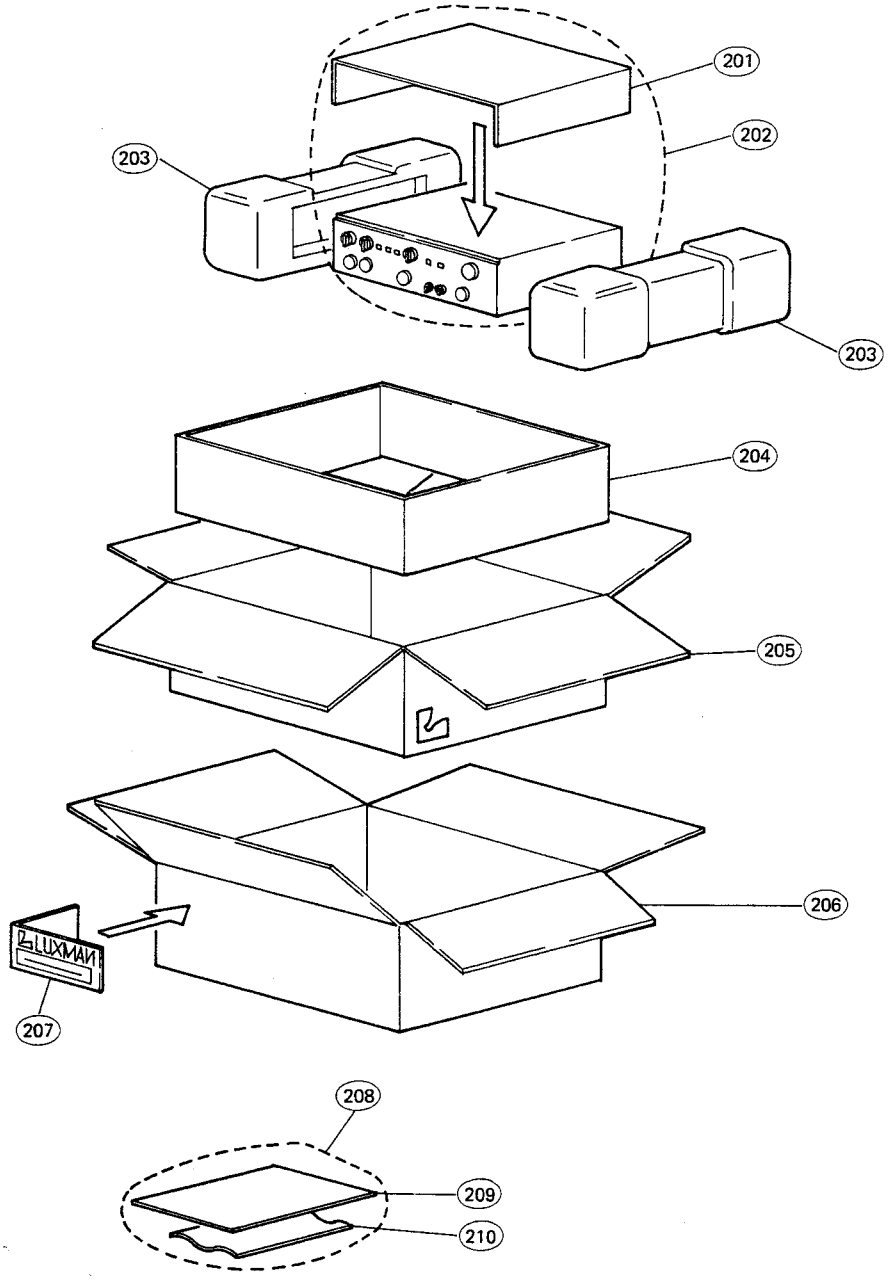
# L-550 Block Diagram



# L-550 Packing Material Parts List




| Symbol No. | Stock No. | Description |
|---|---|---|
| 201 | WZ1011 | Paper, Protector |
| 202 | XC1028A | Sack, Poly |
| 203 | XB1057 | Pkg, Tray |
| 204 | XD1050 | Pad |
| 205 | XA1304 | Carton, Pkg. |
| 206 | XH1056 | Outer Carton |
| 207 | XG1068 | Label, Voltage (120V) |
| | XG1069 | Label, Voltage (220V) |
| | XG1070 | Label, Voltage (240V) |
| 208 | XC1031 | Sack, Poly |
| 209 | ME0211 | Owner's Manual (EX) |
| | MA0151 | Owner's Manual (J) |
| 210 | WZ1204 | Duster |

# L-550 Exploded View Parts List



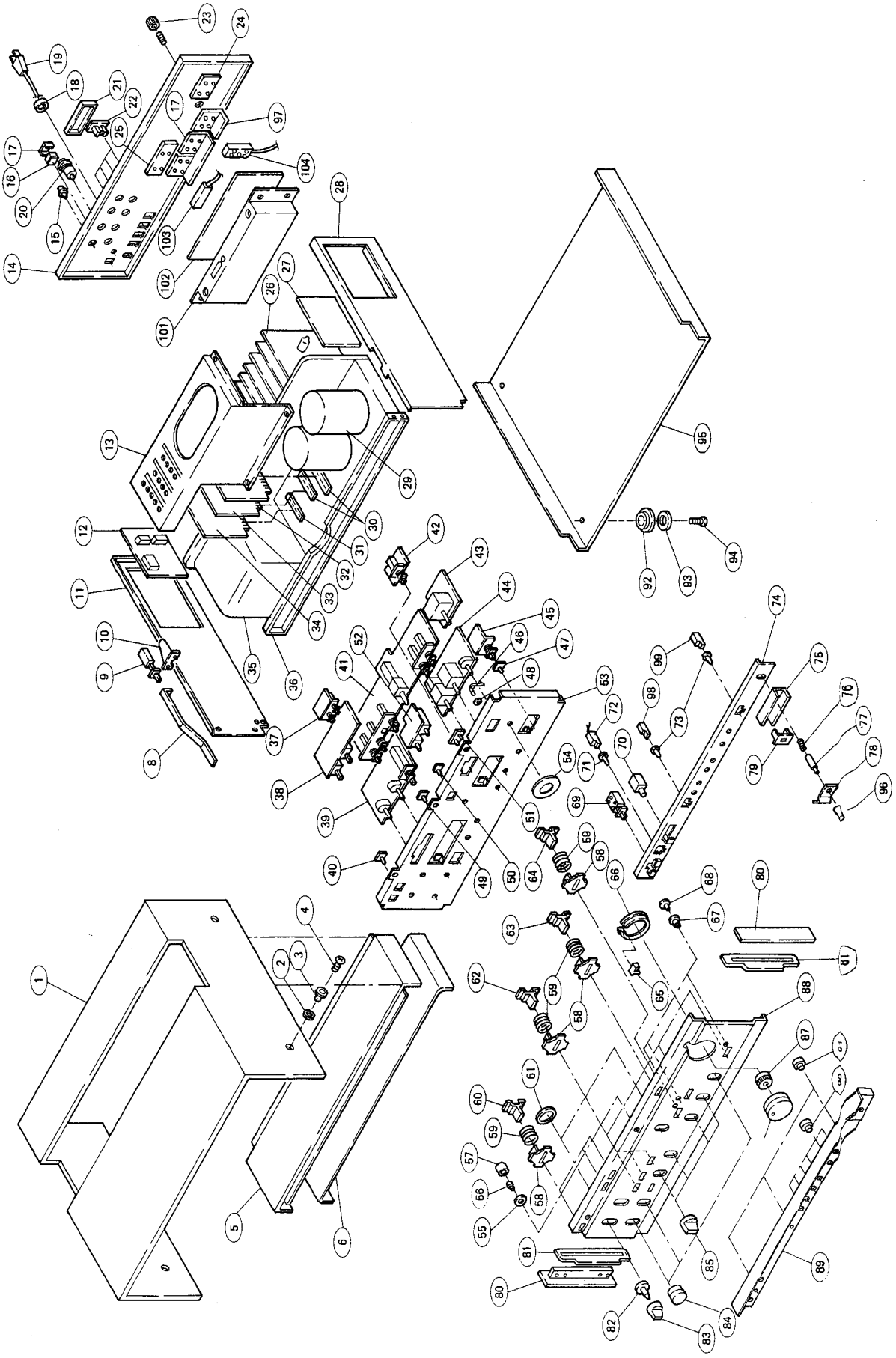
| Symbol No. | Parts No. | Description | Q'ty |
|---|---|---|---|
| 1 | WB1097 | Wooden Case | 1 |
| 2 | YWA040A | Washer, 4ϕ | 4 |
| 3 | WD1144 | Escutcheon | 4 |
| 4 | YJB40C14 | Screw, M4x10 | 4 |
| 5 | WT1044 | Ventilation, 1044 | 1 |
| 6 | WT1046 | Ventilation, 1046 | 1 |
| 7 | | PB-1401-4 | 1 |
| 8 | UZ1295 | Shaft, 1295 | 1 |
| 9 | SP0080 | SW, Push SDU4P TV-5 (power) | 1 |
| 10 | UR1337 | Bkt.,1337 | 1 |
| 11 | UD1156-2 | Side Panel | 1 |
| 12 | | PB-1402-1 | 1 |
| 13 | UJ1102 | Cover, 1102 | 1 |
| 14 | UC1209-1 | Rear Panel (J,A) | 1 |
| | UC1209-2 | Rear Panel (AE) | 1 |
| | UC1209-3 | Rear Panel (AK,EK) | 1 |
| 15 | AT5026A | Terminal, SP Black | 4 |
| | AT5026B | Terminal, SP Red | 4 |
| 16 | UZ1244 | Housing, LPS (J) | 1 |
| 17 | UZ1245 | Termianl, LPS (J) | 1 |
| 18 | BU0033 | Bush (AK,AZ) | 1 |
| | BU0039 | Bush (EG) | 1 |
| | BU0080 | Bush (J) | 1 |
| 19 | BK0018 | AC Cord (120V) | 1 |
| | BK0022 | AC Cord (220V) | 1 |
| | BK0023 | AC Cord (240V) | 1 |
| | BK0048 | AC Cord (J) | 1 |
| 20 | AL0001 | Lamp, BNB-2 (J) | 1 |
| 21 | UJ1107 | Cover, 1107 (E) | 1 |
| 22 | AC0010 | AS Socket MD-40 (E) | 1 |
| | AC0055 | AS Socket S-I6488 (J) | 1 |
| 23 | AG0110 | Terminal, GNG Lux-1260 | 1 |
| 24 | | PB-1401-7 | 1 |
| 25 | | PB-1400-4 | 1 |
| 26 | BE1088 | Heat Pipe | 1 |
| 27 | | PB-1401-1 | 1 |
| 28 | UH1056-1 | Side Panel | 1 |
| 29 | CE1454 | Cap, 50V 30,000uF | 2 |
| 30 | AS0258 | PB Socket 18S | 2 |
| 31 | AS0192 | PB Socket 10S | 1 |
| 32 | | PB-1400-2b | 1 |
| 33 | | PB-1400-2a | 1 |
| 34 | | PB-1400-3 | 1 |
| 35 | PT2591 | Trans, Power P-2591(J) | 1 |
| | PT2593 | Trans, Power P-2593(E) | 1 |
| 36 | UH1037 | Channel Bar | 1 |
| 37 | | PB-1401-5 (0273) | 1 |
| 38 | | PB-1402 | 1 |
| 39 | | PB-1402-2 | 1 |
| 40 | | PB-1401-8 | 1 |
| 41 | | PB-1401 | 1 |
| 42 | | PB-1402-4 | 1 |
| 43 | | PB-1402-3 | 1 |
| 44 | | PB-1401-2 | 1 |
| 45 | | PB-1402-5 | 1 |
| 46 | AL0070 | Lamp | 1 |
| 47 | | PB-1402-6 | 1 |
| 48 | UZ1077 | Bush, 1077 | 1 |
| 49 | | PB-1402-7 | 1 |
| 50 | | PB-1402-8 | 1 |

| Symbol No. | Parts No. | Description | Q'ty |
|---|---|---|---|
| 48 | UZ1077 | Bush, 1077 | 1 |
| 49 | | PB-1402-7 | 1 |
| 50 | | PB-1402-8 | 1 |
| 51 | | PB-1401-6 | 1 |
| 52 | | PB-1401-3 | 1 |
| 53 | UB1074-2 | Sub Panel | 1 |
| 54 | WQ5005 | Fiber | 1 |
| 55 | UW1151 | Spacer | 2 |
| 56 | WE1113 | Protector | 2 |
| 57 | WZ1188 | Spacer | 1 |
| 58 | WE1103 | Protector | 11 |
| 59 | UU1042-1 | Spring | 11 |
| 60 | WJ1166-2 | Knob, Mold | 3 |
| 61 | WD1141 | Escutcheon | 3 |
| 62 | WJ1165-1 | Knob, Mold | 6 |
| 63 | WJ1165-2 | Knob, Mold | 1 |
| 64 | WJ1166-1 | Knob, Mold | 1 |
| 65 | WG1020 | Acryl, Pilot | 1 |
| 66 | WD1140 | Escutcheon | 1 |
| 67 | WD1145 | Escutcheon | 4 |
| 68 | WE1112 | Protector | 7 |
| 69 | SP0090 | Preheat | 1 |
| 70 | AJ0014 | Jack LJ264-1-7 | 1 |
| 71 | TD0232 | LED (Orange) | 1 |
| 72 | AS0263 | Socket, LED | 1 |
| 73 | TD0233 | LED (Green) | 2 |
| 74 | UH1038 | Channel, 1038 | 1 |
| 75 | UZ1299 | Bkt., 1299 | 1 |
| 76 | UU1043 | Spring, 1043 | 1 |
| 77 | UZ1296 | Shaft, 1296 | 1 |
| 78 | UZ1297 | Bkt., 1297 | 1 |
| 79 | UZ1298 | Bkt., 1298 | 1 |
| 80 | WC1037 | Ornametn Plate | 2 |
| 81 | UW1153 | Spacer | 2 |
| 82 | WJ1164 | Knob, Mold | 3 |
| 83 | WK1134 | Knob, Metal | 3 |
| 84 | WH1132 | Knobset | 3 |
| 85 | WH1133 | Knobset | 4 |
| 86 | WK1135 | Knob, Metal | 1 |
| 87 | WJ1163 | Knob, Mold | 1 |
| 88 | WA1242-3 | Panel, Front | 1 |
| 89 | WA1243 | Panel | 1 |
| 90 | AT0147 | 1P Pin Jack UA0036 | 6 |
| 91 | WE1112 | Protector | 7 |
| 92 | WN1024 | Foot, Metal | 4 |
| 93 | WN1025 | Felt, Foot | 4 |
| 94 | YJB40C08 | Screw, M4x14 | 4 |
| 95 | UE1116 | Bottom Plate | 1 |
| 96 | WJ1168 | Knob, Mold | 2 |
| 97 | | PB-1411 | 1 |
| 98 | AS0264 | Socket, LED | 1 |
| 99 | AS0265 | Socket, LED | 1 |
| 100 | UR1334 | Bkt. | 1 |
| 101 | UK1122 | Plate, Shield | 1 |
| 102 | | PB-1400 | 1 |
| 103 | SZ0024 | Cable, Remote (Function) | 1 |
| 104 | SZ0025 | Cable, Remote (Cartridge) | 1 |

Accessary

| | | | |
|---|---|---|---|
| | ME0211 | Owner's Manual (EX) | 1 |
| | MA0151 | Owner's Manual (J) | 1 |

# Exploded View



# L—550 調整手順



1）MCヘッドアンプ部定電圧電源部DC Off Setの調整

マッテング条件　Input Selector……Phono Front

Cartridge Selector……MC 300－ohm

Phono Input (Front)……Open

(1) MCヘッドアンプ部（PB－1400）に示すチェック端子W36（AVR.＋側）及びW38（AVR.－側)。W31（L－ch出力）及びW29（R－ch出力）のそれぞれと対アース間にDC電圧計を接続する。

(2) Power SwitchをONにし、W36、W38に接続した電圧計が、＋10.25V、－10.25Vになる様PB－1400に示すVR102（＋側）及VR103（－側）にて調整する。

2）MCヘッドアンプ入力Off Set調整

(1) カートリッジインピーダンススイッチを300－ohmの位置にする。
ファンクションスイッチをPhono Frontにする。

(2) Phono Frant入力端子に高感度DC電圧計を接続し、Powr Sw ON、2分後、＋150μVになる様VR101a（L－ch）VR101b（R－ch）により調整する。(PB－1400)

3）プリアンプ部定電圧電源の調整

(1) PB－1400－1に示すチェック端子W22（＋側）及W17（－側）と対アース間にDC電圧を接続する。

(2) PB－1400－1に示すVR201（＋側）及VR202（－側）にて＋31.25V、－31.25Vになる様調整する。

4）イコライザー部DC Off Setの調整

Phono Input（Front）にショートピンを入れる。

(1) PB－1401－1に示すチェック端子P－2コネクターポストと対アース間にDC電圧計を接続する。
※コネクタポストシルクNo.1側→Lch. No.3側→Rchとなっています。

(2) PB－1400－1に示すVR401a（Rch）及VR401b（Lch）にてOVになる様調整する。

5）メイン部定電圧電源の調整

(1) Volume Controlを最少にし各フィルタースイッチはOff又はディフィートにしておく。

(2) PB－1400－3に示すチェック端子C312（＋側）及C311（－側）と対アース間にDC電圧計を接続する。

(3) PB－1400－3に示すVR301（＋側）及VR302（－側）にて＋46.5V、－46.5Vになる様調整する。

6）メイン部DC Off Set及アイドリングの調整

(1) PB－1403－2に示すチェック端子TP（Lch）及PB－1403－3に示すチェック端子TP（Rch）と対アース間にDC電圧計を接続する。

(2) PB－1400－2（Lch. Rch. で2枚有ります。）で示すVR351にてOVになる様調整する。

(3) PB－1403－2に示すR814aの両端（0.22ΩLch）及PB－1403－3に示すR814bの両端（0.22ΩRch）にそれぞれDC電圧計を接続する。

(4) PB－1403に示すVR801a（Lch）及PB－1403－1に示すVR801b（Rch）にて160mVになる様調整する。

※　プリヒーティング：Power SwitchをOFFの状態でこのスイッチをONにするとプリヒーティングのインジケータが点灯し、他のインジケータが点灯せず又ファイナルのトランジスターへの電流だけがカットされ、その他は動作状態となっています。消費電力は約40W。

# Alignment Procedure



1. Alignment of MC Headamp. Regulator & DC Offset

Setting Conditions - Input Selector: Phono Front
Cartridge Selector: MC 300-ohm
Phono Input (Front): Open

(1) Connect a DC voltmeter in between the ground and the test-points shown on MC Headamp. section (PB-1400), W36(AVR, positive) and W38(AVR, negative), and W31(L-CH output) and W29(R-CH output) respectively.

(2) Press to switch Power Switch ON and adjust VR102(positive) and VR103(negative) shown on PB-1400 to make the DC voltmeter connected to W36 and W38 read +10.25V and -10.25V respectively.

2. Alignment of MC Headamp. Input Offset

(1) Set Cartridge Impedance Selector at 300-ohm and Input Selector Button at Phono Front.

(2) Connect a high sensitive DC voltmeter and press to switch Power Switch ON. After 2 minutes, adjust VR101a(L-CH) and VR101b(R-CH) on PB-1400 to make the voltmeter read +150uV.

3. Alignment of Preamp. Section Regulator

(1) Connect a DC voltmeter in between the ground and the test-points shown on PB-1400-1, W22(positive) and W17(negative).

(2) Adjust VR201(positive) and VR202(negative) shown on PB-1400-1 to make the voltmeter read +31.25V and -31.25V respectively.

4. Alignment of Equalizer Section DC Offset

Insert short pin-plugs into Phono-Front Input Jack.

(1) Connect a DC voltmeter in between the ground and the test-point shown on PB-1401-1, P-2 connector post (No. 1 for L-CH, No. 3 for R-CH).

(2) Adjust VR401a(R-CH) and VR401b(L-CH) shown on PB-1401-1 to make the voltmeter read OV.

5. Alignment of Mainamp. Section Regulator

(1) Turn Volume Control to the minimum and set each Filter Switch at OFF or Defeat position.

(2) Connect a DC voltmeter in between the ground and the check-points shown on PB-1400-3, C312(positive) and C311(negative).

(3) Adjust VR301(positive) and VR302(negative) to make the voltmeter read +46.5V and -46.5V respectively.

6. Alignment of Mainamp. section DC Offset and Idling Current

(1) Connect a DC voltmeter in between the ground and the check-points, TP(L-CH) shown on PB-1403-2 and TP(R-CH) on PB-1403-3.

(2) Adjust VR351 shown on PB-1400-2 (2 pcs. for L-CH and R-CH) to make the voltmeter read OV.

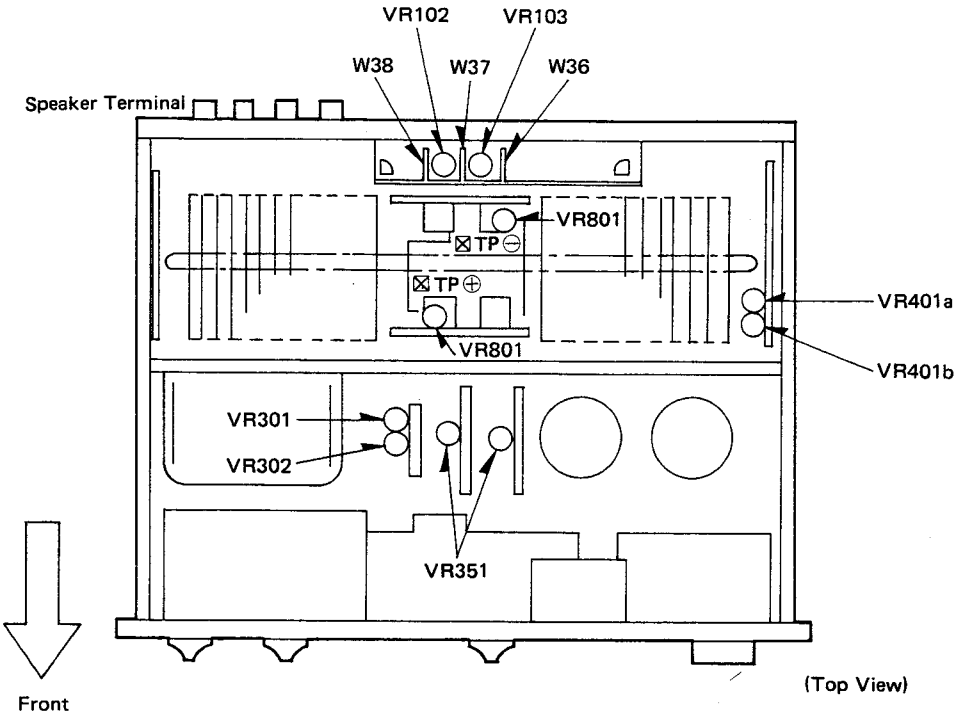
(3) Connect a DC voltmeter to each both ends of R814a(0.22-Ohm, L-CH) shown on PB-1403-2 and R814b(0.22-Ohm, R-CH).

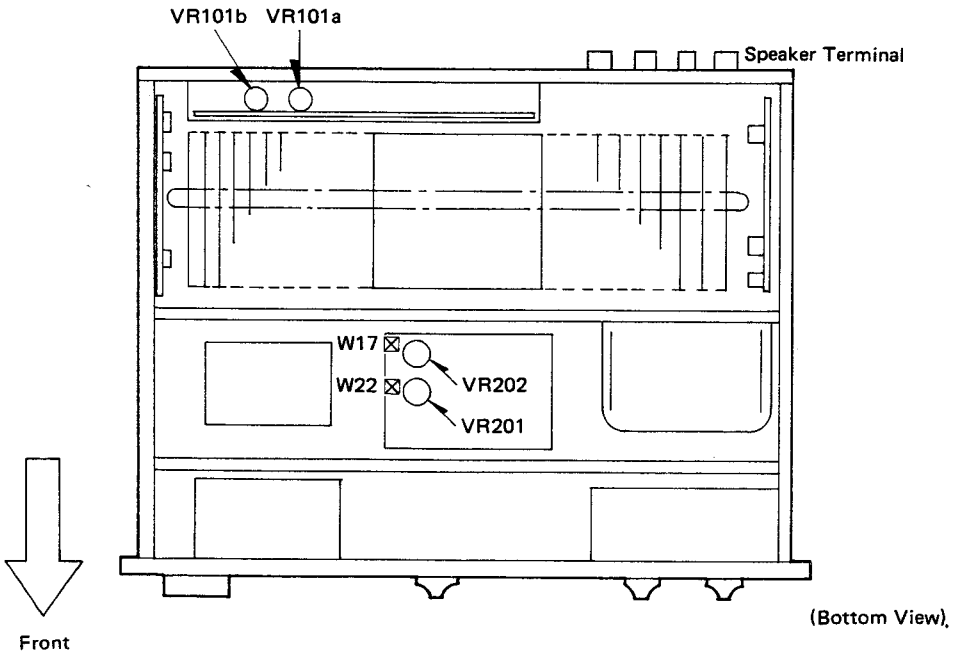
(4) Adjust VR801a(L-CH) shown on PB-1403 and VR801b(R-CH) on PB-1403-1 to make the voltmeter read 160mV.

Pre-Heating Switch: When this switch is switched ON with Power Switch OFF, Pre-Heating Indicator lights up, while other indicators would not light up. Current only to the final transistors is cut off and others are kept in operation.

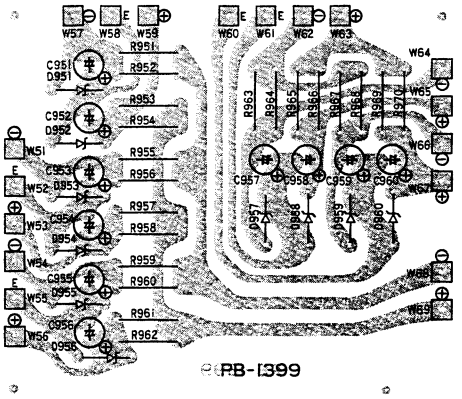
# Adjustment Locations





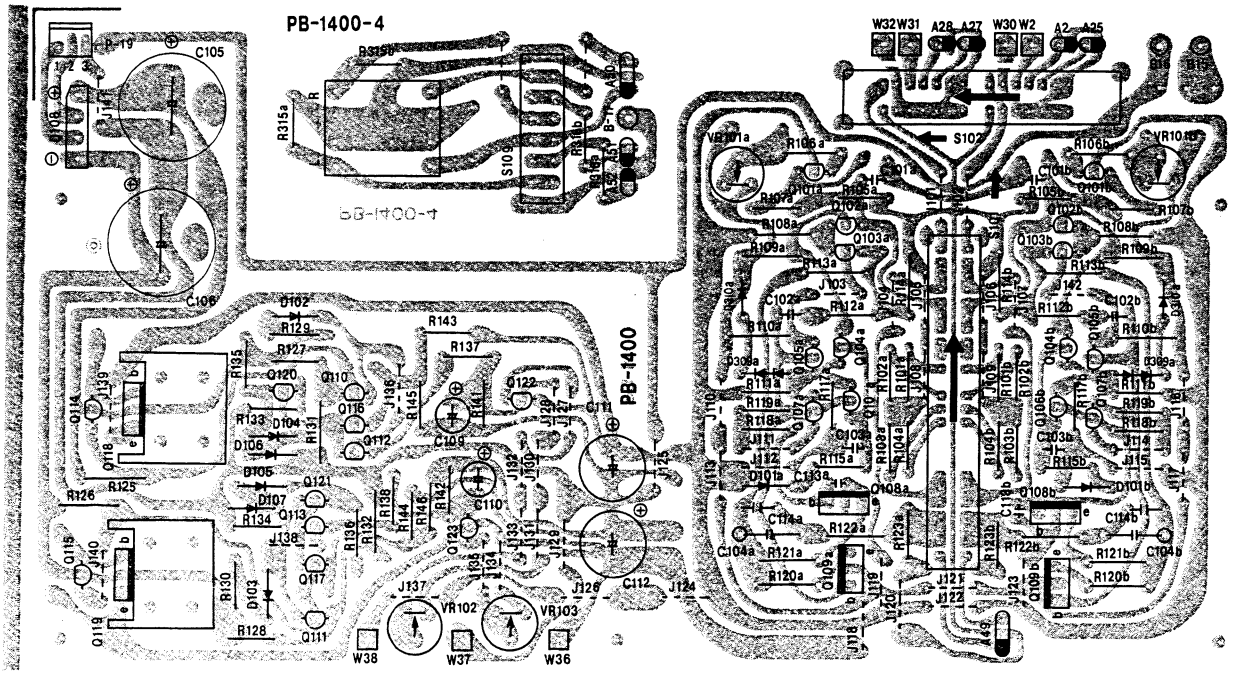
# PB1399 Parts List




| Symbol No. | Stock No. | Description |
|---|---|---|
| (Zener,Diode) | | |
| D951 | TD0043 | WZ-130 |
| D952 | TD0043 | WZ-130 |
| D953 | TD0043 | WZ-130 |
| D954 | TD0043 | WZ-130 |
| D955 | TD0043 | WZ-130 |
| D956 | TD0043 | WZ-130 |
| D957 | TD0043 | WZ-130 |
| D958 | TD0043 | WZ-130 |
| D959 | TD0043 | WZ-130 |
| D960 | TD0043 | WZ-130 |
| (Capacitor) | | |
| C951 | CE0075 | 22uF 16V E1 |

| Symbol No. | Stock No. | Description | | |
|---|---|---|---|---|
| C952 | CE0075 | 22uF | 16V | E1 |
| C953 | CE0075 | 22uF | 16V | E1 |
| C954 | CE0075 | 22uF | 16V | E1 |
| C955 | CE0075 | 22uF | 16V | E1 |
| C956 | CE0075 | 22uF | 16V | E1 |
| C957 | CE0075 | 22uF | 16V | E1 |
| C958 | CE0075 | 22uF | 16V | E1 |
| C959 | CE0075 | 22uF | 16V | E1 |
| C960 | CE0075 | 22uF | 16V | E1 |
| | CK0145 | 0.022uF | 50V | Ce |
| (Resistor) | | | | |
| R951 | RD2600 | 5.6K | 1/2W | Rd |
| R952 | RD2602 | 6.8K | 1/2W | Rd |
| R953 | RD2600 | 5.6K | 1/2W | Rd |
| R954 | RD2602 | 6.8K | 1/2W | Rd |
| R955 | RD2600 | 5.6K | 1/2W | Rd |
| R956 | RD2602 | 6.8K | 1/2W | Rd |
| R957 | RD2600 | 5.6K | 1/2W | Rd |
| R958 | RD2602 | 6.8K | 1/2W | Rd |
| R959 | RD2600 | 5.6K | 1/2W | Rd |
| R960 | RD2602 | 6.8K | 1/2W | Rd |
| R961 | RD2600 | 5.6K | 1/2W | Rd |
| R962 | RD2602 | 6.8K | 1/2W | Rd |
| R963 | RD2600 | 5.6K | 1/2W | Rd |
| R964 | RD2600 | 5.6K | 1/2W | Rd |
| R965 | RD2600 | 5.6K | 1/2W | Rd |
| R966 | RD2600 | 5.6K | 1/2W | Rd |
| R967 | RD2600 | 5.6K | 1/2W | Rd |
| R968 | RD2600 | 5.6K | 1/2W | Rd |
| R969 | RD2600 | 5.6K | 1/2W | Rd |
| R970 | RD2600 | 5.6K | 1/2W | Rd |

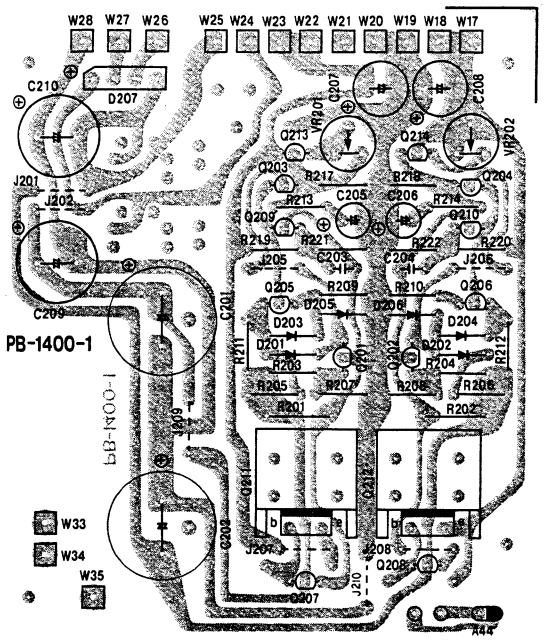
# PB1400 Parts List



| Symbol No. | Stock No. | Description | | |
|---|---|---|---|---|
| (Slide Switch) | | | | |
| S101 | SS0146 | SSR266N (Cartridge) | | |
| S102 | SS0145 | SSR24601D (Function) | | |
| (Semi-Fixed Resistor) | | | | |
| VR101a,b | RT0125 | CR29R 2.2KB | | |
| VR102 | RT0124 | SR29R 2.2KB | | |
| VR103 | RT0124 | SR29R 2.2KB | | |
| (Transistor,FET) | | | | |
| Q101a,b | TR5004 | 2SC2240-BL | | |
| Q102a,b | TR0372 | 2SA1114-F | | |
| Q103a,b | TR0372 | 2SA1114-F | | |
| Q104a,b | TR5004 | 2SC2240 | | |
| Q105a,b | TR5004 | 2SC2240 | | |
| Q106a,b | TR5005 | 2SA970 | | |
| Q107a,b | TR0198 | 2SC1815 | | |
| Q108a,b | TR0121 | 2SC1626 | | |
| Q109a,b | TR0122 | 2SA816 | | |
| Q110 | TR0087 | 2SA1015 | | |
| Q111 | TR0198 | 2SC1815 | | |
| Q112 | TR0198 | 2SC1815 | | |
| Q113 | TR0087 | 2SA1015 | | |
| Q114 | TR0198 | 2SC1815 | | |
| Q115 | TR0087 | 2SA1015 | | |
| Q116 | TR0198 | 2SC1815 | | |
| Q117 | TR0087 | 2SA1015 | | |
| Q118 | TR0190 | 2SC1624 | | |
| Q119 | TR0188 | 2SA814 | | |
| Q120 | TR0198 | 2SC1815 | | |
| Q121 | TR0087 | 2SA1015 | | |
| Q122 | TF0033 | 2SK30A-TM | | |
| Q123 | TF0033 | 2SK30A-TM | | |
| (Diode,Varistor) | | | | |
| D101a,b | TD0227T | 1SS41 | | |
| D102 | TD0227T | 1SS41 | | |
| D103 | TD0227T | 1SS41 | | |
| D104 | TD0227T | 1SS41 | | |
| D105 | TD0227T | 1SS41 | | |
| D106 | TD0227T | 1SS41 | | |
| D107 | TD0227T | 1SS41 | | |
| D108 | TD0137 | S1VB10 | | |
| D309a,b | TV0021 | KB465 Varistor | | |
| D310a,b | TV0033 | KB365 Varistor | | |
| (Capacitor) | | | | |
| C101a,b | CM0175 | 1000pF | 500V | Mi |
| C102a,b | CM0068 | 100pF | 50V | Mi |
| C103a,b | CM0072 | 150pF | 50V | Mi |
| C104a,b | CQ0697 | 1uF | 100V | Fi |
| C105 | CE1455 | 3300uF | 25V | El |
| C106 | CE1455 | 3300uF | 25V | El |
| C109 | CE1977 | 4.7uF | 50V | El |

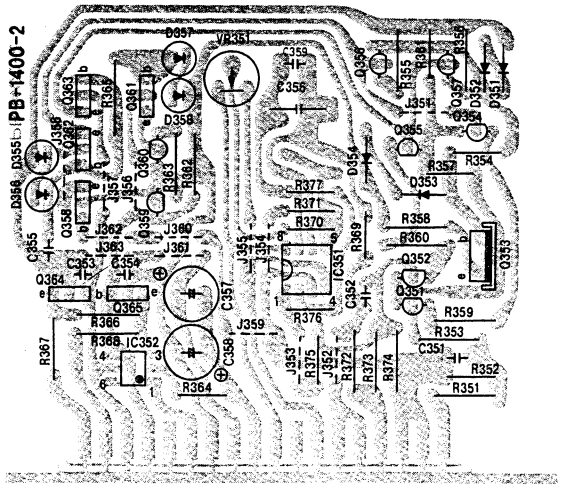
| Symbol No. | Stock No. | Description | | |
|---|---|---|---|---|
| C110 | CE1977 | 4.7uF | 50V | El |
| C111 | CE0075 | 22uF | 16V | El |
| C112 | CE0075 | 22uF | 16V | El |
| C113a,b | CM0060 | 47pF | 50V | Mi |
| C114a,b | CM0172 | 680pF | 500V | Mi |
| | CM0153 | 22pF | 500V | Mi |
| (Resistor) | | | | |
| R101a,b | RB0348T | 100 | | Rd |
| R102a,b | RB0416T | 68K | | Rd |
| R103a,b | RB0352T | 150 | | Rd |
| R104a,b | RB0340T | 47 | | Rd |
| R105a,b | RB0358T | 270 | | Rd |
| R106a,b | RD2572 | 390 | 1/2W | Rd |
| R107a,b | RB0408T | 33K | | Rd |
| R108a,b | RD2578 | 680 | 1/2W | Rd |
| R109a,b | RD2570 | 330 | 1/2W | Rd |
| R110a,b | RD2570 | 330 | 1/2W | Rd |
| R111a,b | RB0400T | 15K | | Rd |
| R112a,b | RB0340T | 47 | | Rd |
| R113a,b | RD2550 | 47 | 1/2W | Rd |
| R114a,b | RB0308 | 2.2 | | Rd |
| R115a,b | RB0360T | 330 | | Rd |
| R117a,b | RB0360T | 330 | | Rd |
| R118a,b | RB0370T | 820 | | Rd |
| R119a,b | RB0362T | 390 | | Rd |
| R120a,b | RS2501L | 10 | 1/2W | Rf |
| R121a,b | RS2501L | 10 | 1/2W | Rf |
| R122a,b | RD2546 | 33 | 1/2W | Rd |
| R123a,b | RB0444T | 1M | | Rd |
| R125 | RD2632 | 120K | 1/2W | Rd |
| R126 | RD2632 | 120K | 1/2W | Rd |
| R127 | RB0360T | 330 | | Rd |
| R128 | RB0360T | 330 | | Rd |
| R129 | RB0360T | 330 | | Rd |
| R130 | RB0360T | 330 | | Rd |
| R131 | RD2610 | 15K | 1/2W | Rd |
| R132 | RD2608 | 12K | 1/2W | Rd |
| R133 | RB0346T | 82 | | Rd |
| R134 | RB0346T | 82 | | Rd |
| R135 | RB0390T | 5.6K | | Rd |
| R136 | RB0390T | 5.6K | | Rd |
| R137 | RB0336T | 33 | | Rd |
| R138 | RB0336T | 33 | | Rd |
| R141 | RB0394T | 8.2K | | Rd |
| R142 | RB0394T | 8.2K | | Rd |
| R143 | RD0458 | 4.7K | 1/3W | Rd |
| R144 | RD0458 | 4.7K | 1/3W | Rd |
| R145 | RD0458 | 4.7K | 1/3W | Rd |
| R146 | RD0458 | 4.7K | 1/3W | Rd |

# PB1400-1 Parts List




| Symbol No. | Stock No. | Description |
|---|---|---|
| (Transistor,FET) | | |
| Q201 | TR0087 | 2SA1015 |
| Q202 | TR0198 | 2SC1815 |
| Q203 | TR5004 | 2SC2240 |
| Q204 | TR5005 | 2SA970 |
| Q205 | TR0198 | 2SC1815 |
| Q206 | TR0087 | 2SA1015 |
| Q207 | TR0198 | 2SC1815 |
| Q208 | TR0087 | 2SA1015 |
| Q209 | TR5004 | 2SC2240 |
| Q210 | TR5005 | 2SA970 |
| Q211 | TR0190 | 2SC1624 |
| Q212 | TR0188 | 2SA814 |
| Q213 | TF0033 | 2SK30A-TM |
| Q214 | TF0033 | 2SK30A-TM |
| (Diode) | | |
| D201 | TD0227T | 1SS41 |
| D202 | TD0227T | 1SS41 |
| D203 | TD0227T | 1SS41 |
| D204 | TD0227T | 1SS41 |
| D205 | TD0227T | 1SS41 |
| D206 | TD0227T | 1SS41 |
| D207 | TD0139 | S1VB20 |
| (Capacitor) | | |
| C201 | CE1909 | 1000uF 50V E1 |
| C202 | CE1909 | 1000uF 50V E1 |
| C203 | CM0056 | 33pF 50V Mi |
| C204 | CM0056 | 33pF 50V Mi |
| C205 | CE1977 | 4.7uF 50V E1 |
| C206 | CE1977 | 4.7uF 50V E1 |
| C207 | CE0100 | 10uF 50V E1 |
| C208 | CE0100 | 10uF 50V E1 |
| C209 | CE2048 | 470uF 50V E1 |
| C210 | CE2048 | 470uF 50V E1 |
| | CK0145 | 0.022uF 50V Ce |
| (Semi-Fixex Resistor) | | |
| VR201 | RT0100 | SR19R 2.2KB |
| VR202 | RT0100 | SR19R 2.2KB |
| (Resistor) | | |
| R201 | RD2632 | 120K 1/2W Rd |
| R202 | RD2632 | 120K 1/2W Rd |
| R203 | RB0360T | 330 Rd |
| R204 | RB0360T | 330 Rd |
| R205 | RB0360T | 330 Rd |
| R206 | RB0360T | 330 Rd |
| R207 | RB0406T | 27K Rd |
| R208 | RB0402T | 18K Rd |
| R209 | RB0346T | 82 Rd |
| R210 | RB0346T | 82 Rd |
| R211 | RB0408T | 33K Rd |
| R212 | RB0408T | 33K Rd |
| R213 | RB0336T | 33 Rd |
| R214 | RB0336T | 33 Rd |
| R217 | RB0392T | 6.8K Rd |
| R218 | RB0392T | 6.8K Rd |
| R219 | RD0450 | 22K 1/3W Rd |
| R220 | RD0450 | 22K 1/3W Rd |
| R221 | RD0460 | 3.3K 1/3W Rd |
| R222 | RD0460 | 3.3K 1/3W Rd |

# PB1400-2 Parts List

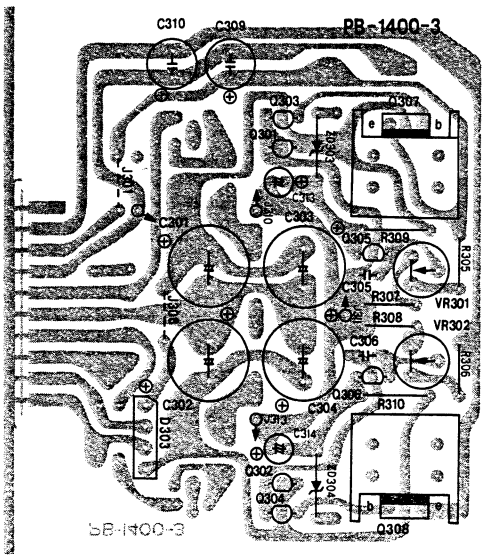



| Symbol No. | Stock No. | Description |
|---|---|---|
| (Semi-Fixed Resistor) | | |
| VR351a,b | RT0017 | SR29R 47KB |
| (IC) | | |
| IC351a,b | TC5040 | NJM082D |
| IC352a,b | TC0199 | NJL5160D |
| (Transistor,FET) | | |
| Q351,2 | TF0032 | 2SK146-BL |
| Q353a,b | TR0121 | 2SC1626 |
| Q354a,b | TR0236 | 2SC2229 |
| Q355a,b | TR0236 | 2SC2229 |
| Q356a,b | TR0087 | 2SA1015 |

| Symbol No. | Stock No. | Description | | |
|---|---|---|---|---|
| Q357a,b | TR0087 | 2SA1015 | | |
| Q358a,b | TR0369 | 2SA1144 | | |
| Q359a,b | TR0198 | 2SC1815 | | |
| Q360a,b | TR0198 | 2SC1815 | | |
| Q361a,b | TR0360 | 2SC2704 | | |
| Q362a,b | TR0369 | 2SA1144 | | |
| Q363a,b | TR0369 | 2SA1144 | | |
| Q364a,b | TR0318 | 2SC1904-BV | | |
| Q365a,b | TR0342 | 2SA899-BV | | |
| | TF0018 | 2SK147-BK | | |
| (Diode,Varistor) | | | | |
| D351a,b | TD0227T | 1SS41 | | |
| D352a,b | TD0227T | 1SS41 | | |
| D353a,b | TD0227T | 1SS41 | | |
| D354a,b | TD0227T | 1SS41 | | |
| D355a,b | TV0033 | KB365 Varistor | | |
| D356a,b | TV0033 | KB365 Varistor | | |
| D357a,b | TV0033 | KB365 Varistor | | |
| D358a,b | TV0033 | KB365 Varistor | | |
| (Capacitor) | | | | |
| C351a,b | CM0060 | 47pF | 50V | Mi |
| C352a,b | CM0050 | 10pF | 50V | Mi |
| C353a,b | CM0164 | 5pF | 500V | Mi |
| C354a,b | CM0164 | 5pF | 500V | Mi |
| C356a,b | CE5050 | 2.2uF | 50V | El |
| C357a,b | CE0107 | 47uF | 63V | El |
| C358a,b | CE0107 | 47uF | 63V | El |
| C359a,b | CM0172 | 680pF | 500V | Mi |

| Symbol No. | Stock No. | Description | | |
|---|---|---|---|---|
| (Resistor) | | | | |
| R351a,b | RD2574 | 470 | 1/2W | Rd |
| R352a,b | RB0442T | 820K | | Rd |
| R353a,b | RD2558 | 100 | 1/2W | Rd |
| R354a,b | RB0416T | 68K | | Rd |
| R355a,b | RS1445 | 47 | 1/3W | Rf |
| R356a,b | RS1445 | 47 | 1/3W | Rf |
| R357a,b | RB0408T | 33K | | Rd |
| R358a,b | RS1445 | 47 | 1/3W | Rf |
| R359a,b | RS1453 | 100 | 1/3W | Rf |
| R360a,b | RS1453 | 100 | 1/3W | Rf |
| R361a,b | RB0424T | 150K | | Rd |
| R362a,b | RS1451 | 82 | 1/3W | Rf |
| R363a,b | RS1451 | 82 | 1/3W | Rf |
| R364a,b | RB0384T | 3.3K | | Rd |
| R365a,b | RB0418 | 82K | | Rd |
| R366a,b | RS1473 | 560 | 1/3W | Rf |
| R367a,b | RS1453 | 100 | 1/3W | Rf |
| R368a,b | RS1453 | 100 | 1/3W | Rf |
| R369a,b | RB0432T | 330K | | Rd |
| R370a,b | RB0396T | 10K | | Rd |
| R371a,b | RB0364T | 470 | | Rd |
| R372a,b | RD2600 | 5.6K | 1/2W | Rd |
| R373a,b | RD2600 | 5.6K | 1/2W | Rd |
| R374a,b | RD0350 | 120 | | Rd |
| R375a,b | RB0404T | 22K | | Rd |
| R376a,b | RB0398T | 12K | | Rd |
| R377a,b | RB0398T | 12K | | Rd |

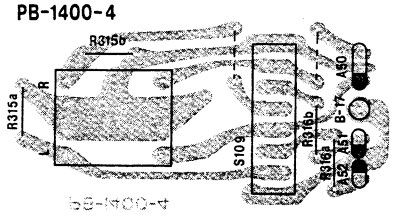
# PB1400-3 Parts List




| Symbol No. | Stock No. | Description |
|---|---|---|
| (Semi-Fixed Resistor) | | |
| VR301 | RT0026 | SR29R 4.7KB |
| VR302 | RT0026 | SR29R 4.7KB |
| (Transistor,FET) | | |
| Q301 | TF0030 | 2SK117Y |
| Q302 | TF0030 | 2SK117Y |
| Q303 | TR5004 | 2SC2240 |
| Q304 | TR5005 | 2SA970 |

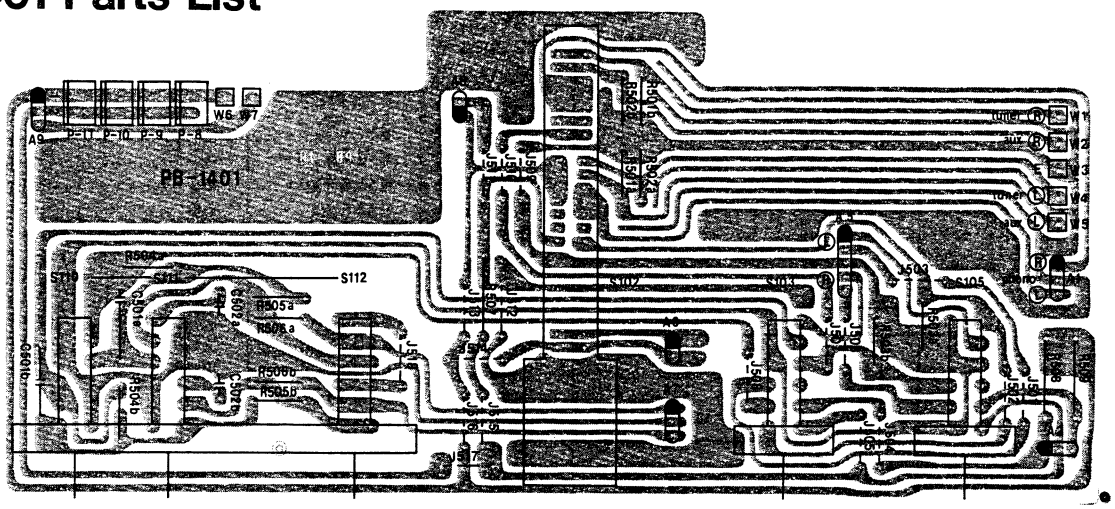
| Symbol No. | Stock No. | Description | | |
|---|---|---|---|---|
| Q305 | TR5004 | 2SC2240 | | |
| Q306 | TR5005 | 2SA970 | | |
| Q307 | TR0190 | 2SC1624 | | |
| Q308 | TR0188 | 2SA814 | | |
| (Diode) | | | | |
| D303 | TD0139 | S1VB20 | | |
| (Zener,Diode) | | | | |
| ZD303 | TD0025 | WZ090 | | |
| ZD304 | TD0025 | WZ090 | | |
| (Capacitor) | | | | |
| C301 | CE2077 | 220uF | 100V | El |
| C302 | CE2077 | 220uF | 100V | El |
| C303 | CE2077 | 220uF | 100V | El |
| C304 | CE2077 | 220uF | 100V | El |
| C305 | CM0056 | 33pF | 50V | Mi |
| C306 | CM0056 | 33pF | 50V | Mi |
| C309 | CE0147 | 10uF | 63V | El |
| C310 | CE0147 | 10uF | 63V | El |
| C313 | CE1948 | 22uF | 16V | El |
| C314 | CE1948 | 22uF | 16V | El |
| (Resistor) | | | | |
| R305 | RD0449 | 27K | 1/3W | Rd |
| R306 | RD0449 | 27K | 1/3W | Rd |
| R307 | RD0456 | 6.8K | 1/3W | Rd |
| R308 | RD0456 | 6.8K | 1/3W | Rd |
| R309 | RD2606 | 10K | 1/2W | Rd |
| R310 | RD2606 | 10K | 1/2W | Rd |

# PB1400-4 Parts List




| Symbol No. | Stock No. | Description |
|---|---|---|
| (4P Pin Jack) | | |
| | AT0150A | T5757BA |
| (Slide Switch) | | |
| S109 | SS0135 | SSB04202 (Signal Processing) |
| (Resistor) | | |
| R315a,b | RB0412T | 47K Rd |

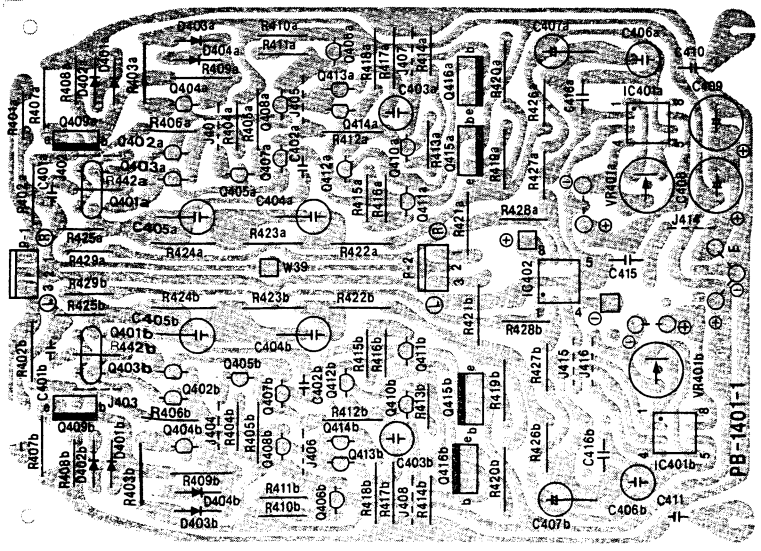
# PB1401 Parts List




| Symbol No. | Stock No. | Description |
|---|---|---|
| (Switch) | | |
| S102 | SR0165 | SRZW6SA (Function) |
| S103 | SP0270 | SUL121A (Monitor) |
| S105 | SP0270 | SUL121A (Recording) |
| S110-112 | SP0265 | SUL331A (Subsonic,High cut,Mono) |
| (Capacitor) | | |
| C501a,b | CQ0610 | 0.33uF 100V Fi |
| C502a,b | CQ0018T | 0.0056uF 50V My |
| (Resistor) | | |
| R501a,b | RB0444T | 1M Rd |

| Symbol No. | Stock No. | Description |
|---|---|---|
| R502a,b | RB0444T | 1M Rd |
| R503a,b | RB0444T | 1M Rd |
| R504a,b | RB0444T | 1M Rd |
| R505a,b | RB0380T | 2.2K Rd |
| R506a,b | RB0384T | 3.3K Rd |
| R507 | RS2746LA | 560 1W Rf |
| R508 | RS2746LA | 560 1W Rf |
| R509 | RS2746LA | 560 1W Rf |
| | RB0444 | 1M Rd |

# PB1401-1 Parts List

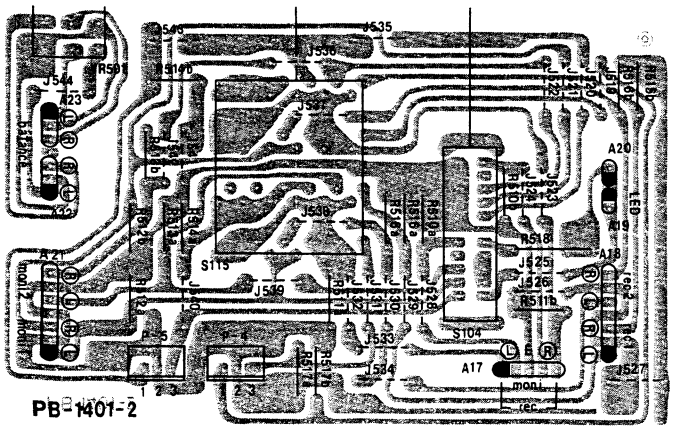



| Symbol No. | Stock No. | Description |
|---|---|---|
| (Semi-Fixed Resistor) | | |
| VR401a,b | RT0024 | CR19R 10KB |
| (Capacitor) | | |
| C401a,b | CM0152 | 10pF 100V Mi |
| C402a,b | CM0056 | 33pF 50V Mi |
| C403a,b | CQ3013 | 1000pF 120V St |
| C404a,b | CQ3025 | 10000pF 120V St |
| C405a,b | CQ3018 | 2700pF 120V St |
| C406a,b | CE1975B | 2.2uF 50V BP El |
| C407a,b | CQ0693 | 0.22uF 100V Fi |
| C408 | CE1981 | 47uF 50V El |
| C409 | CE1981 | 47uF 50V El |
| C410 | CM0068 | 100pF 50V Mi |
| C411 | CM0068 | 100pF 50V Mi |
| C415 | CQ3018 | 2700pF 120V St |
| C416a,b | CM0149 | 330pF 50V Mi |

| Symbol No. | Stock No. | Description |
|---|---|---|
| (IC) | | |
| IC401a,b | TC0197 | TL-071CP |
| IC402 | TC0025 | NJM4558D-D |
| (Transistor,FET) | | |
| Q401a,b | TF0032 | 2SK146-BL |
| Q402a,b | TR0198 | 2SC1845 |
| Q403a,b | TR0198 | 2SC1845 |
| Q404a,b | TR0320 | 2SA992 |
| Q405a,b | TR0320 | 2SA992 |
| Q406a,b | TR0323 | 2SC1815 |
| Q407a,b | TR0332 | 2SA857-V |
| Q408a,b | TR0237 | 2SA949 |
| Q409a,b | TR0132 | 2SD414 |
| Q410a,b | TR0323 | 2SC1815 |
| Q411a,b | TR0198 | 2SC1815 |
| Q412a,b | TR0331 | 2SC1438-V |
| Q413a,b | TR0198 | 2SC1815 |
| Q414a,b | TR0198 | 2SC1815 |
| Q415a,b | TR0209 | 2SC2238 |
| Q416a,b | TR0210 | 2SA968 |
| | TF0018 | 2SK147-BL |
| (Diode) | | |
| D401a,b | TD0227T | 1SS41 |
| D402a,b | TD0227T | 1SS41 |
| D403a,b | TD0227T | 1SS41 |
| D404a,b | TD0227T | 1SS41 |
| (Resistor) | | |
| R401a,b | RB0426T | 180K Rd |
| R402a,b | RS2534 | 10 1/2W Rf |

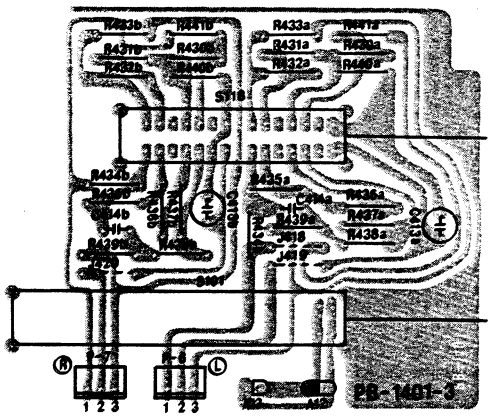
| Symbol No. | Stock No. | Description |
|---|---|---|
| R403a,b | RS1445 | 47 1/3W Rf |
| R404a,b | RB0420T | 100K Rd |
| R405a,b | RS1445 | 47 1/3W Rf |
| R406a,b | RB0408T | 33K Rd |
| R407a,b | RS1445 | 47 1/3W Rf |
| R408a,b | RB0370T | 820 Rd |
| R409a,b | RD2614 | 22K 1/2W Rd |
| R410a,b | RB0386 | 3.9K Rd |
| R411a,b | RB0372T | 1K Rd |
| R412a,b | RD2612 | 18K 1/2W Rd |
| R413a,b | RB0386 | 3.9K Rd |
| R414a,b | RB0372T | 1K Rd |
| R415a,b | RB0378T | 1.8K Rd |
| R416a,b | RB0376T | 1.5K Rd |
| R417a,b | RS1451 | 82 1/2W Rf |
| R418a,b | RS1451 | 82 1/2W Rf |
| R419a,b | RS1435 | 18 1/3W Rf |
| R420a,b | RS1435 | 18 1/3W Rf |
| R421a,b | RD2568 | 270 1/2W Rd |
| R422a,b | RD2573 | 430 1/2W Rd |
| R423a,b | RD2642 | 330K 1/2W Rd |
| R424a,b | RD2616 | 27K 1/2W Rd |
| R425a,b | RB0358T | 270 Rd |
| R426a,b | RB0442T | 820K Rd |
| R427a,b | RB0394T | 8.2K Rd |
| R428a,b | RB0394T | 8.2K Rd |
| R429a,b | RB0398T | 12K Rd |
| R442a,b | RB0354T | 180 Rd |
| | RD2166 | 3.3M 1/3W Rd |

# PB1401-2 Parts List



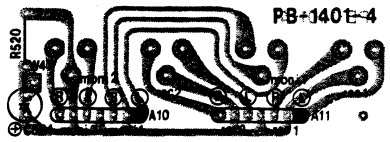

| Symbol No. | Stock No. | Description |
|---|---|---|
| (Rotary Switch) | | |
| S104 | SR0169 | SRZW43N (Tape) |
| S115 | SR0170 | SPJ4085 (Dubbing) |
| (Variable REsistor) | | |
| VR501 | RV0292 | 250KMN (Balance) |
| (Resistor) | | |
| R510a,b | RB0444T | 1M Rd |
| R511a,b | RB0444T | 1M Rd |
| R512a,b | RB0444T | 1M Rd |
| R513a,b | RB0444T | 1M Rd |
| R514a,b | RB0444T | 1M Rd |
| R515a,b | RB0444T | 1M Rd |
| R516a,b | RB0444T | 1M Rd |
| R517a,b | RB0444T | 1M Rd |
| R518 | RS2746LA | 560 1W Rf |

## PB1401-3 Parts List




| Symbol No. | Stock No. | Description |
|---|---|---|
| (Rotary Switch) | | |
| S101<br>S118 | SR0166<br>SR0171 | SRZ2M (Cartridge)<br>SRZW45S(liner Equalized) |
| (Capacitor) | | |
| C413a,b | CQ1446 | 7500pF 50V St |
| C414a,b | CQ1337 | 0.22uF 50V My |
| (Resistor) | | |
| R430a,b | RB0400T | 15K Rd |
| R431a,b | RB0444T | 1M Rd |
| R432a,b | RB0400T | 15K Rd |
| R433a,b | RB0382T | 2.7K Rd |
| R434a,b | RB0386T | 3.9K Rd |
| R435a,b | RB0394T | 8.2K Rd |
| R436a,b | RB0444T | 1M Rd |
| R437a,b | RB0394T | 8.2K Rd |
| R438a,b | RB0382T | 2.7K Rd |
| R439a,b | RB0386T | 3.9K Rd |
| R440a,b | RB0460 | 4.7K Rd |
| R441a,b | RB0381T | 2.4K Rd |

## PB1401-4 Parts List




| Symbol No. | Stock No. | Description |
|---|---|---|
| (4P Pin Jack) | | |
| | AT0151A | T5754-BA |
| (Resistor) | | |
| R520 | RB0348 | 100 Rd |
| (Capacitor) | | |
| C504 | CE0074T | 10uF 16V El |

## PB1401-5 Parts List

| Symbol No. | Stock No. | Description |
|---|---|---|
| (Push Switch) | | |
| S113-114 | SP0273 | SUF23 (Speaker) |

## PB1401-6 Parts List

| Symbol No. | Stock No. | Description |
|---|---|---|
| (LED) | | |
| D407 | TD0233 | EBG5534S grn.(Monitor) |
| D408 | TD0232 | EAA5534S org.(Record) |

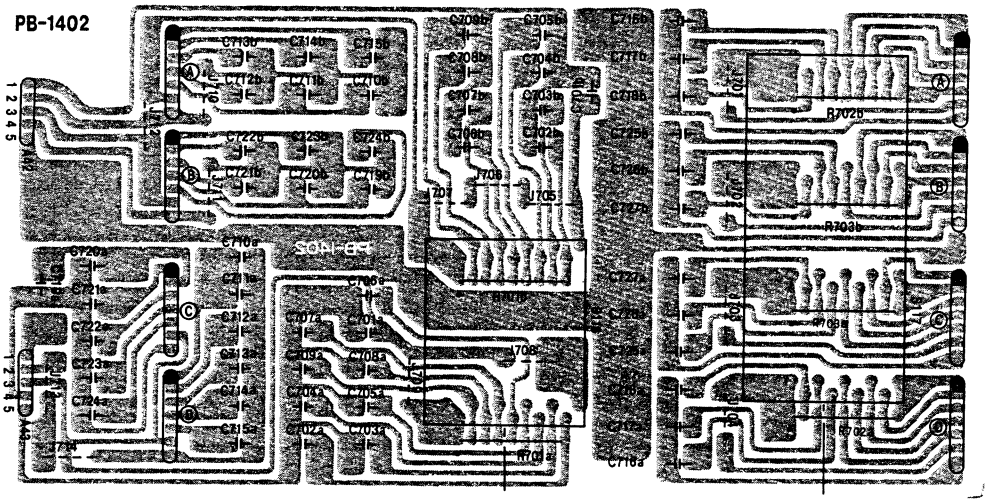
## PB1401-7 Parts List

| Symbol No. | Stock No. | Description |
|---|---|---|
| (4P Pin Jack) | | |
| | AT0151A | T5754-BA |
| (Capacitor) | | |
| C503 | CE0074T | 10uF 16V El |
| (Resistor) | | |
| R519 | RB0348 | 100 Rd |

# PB1401-8 Parts List

| Symbol No. | Stock No. | Description |
|---|---|---|
| (LED) | | |
| D409 | TD0232 | EAA5534S org.(Warm-up) |

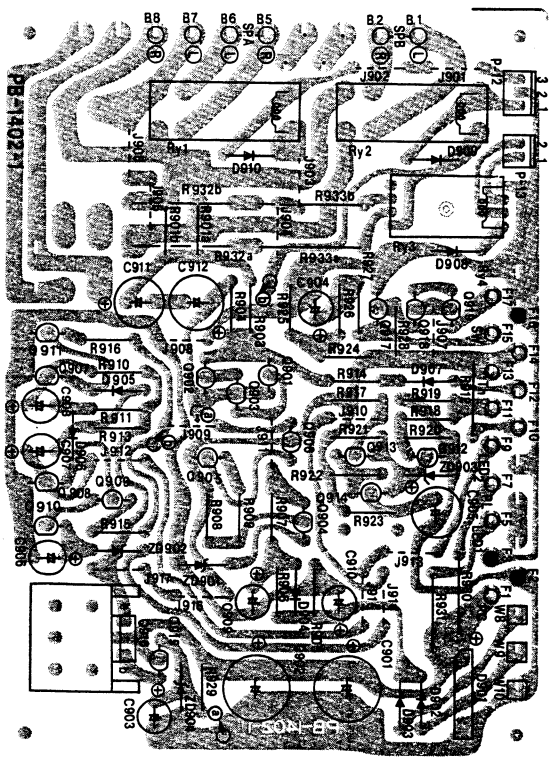
# PB1402 Parts List




| Symbol No. | Stock No. | Description | | |
|---|---|---|---|---|
| (Rotary Switch) | | | | |
| S116 | SR0167 | SRJ2029(Treble Turnover) | | |
| S117 | SR0168 | SRJ4049(Bass Turnover) | | |
| (Capacitor) | | | | |
| C701a,b | CQ0027T | 0.0068uF | 50V | My |
| C702a,b | CQ0021T | 0.0033uF | 50V | My |
| C703a,b | CQ0017T | 0.0082uF | 50V | My |
| C704a,b | CQ0014T | 0.015uF | 50V | My |
| C705a,b | CQ0013T | 0.022uF | 50V | My |
| C706a,b | CQ1319T | 0.033uF | 50V | My |
| C707a,b | CQ0008T | 0.056uF | 50V | My |
| C708a,b | CQ0006T | 0.082uF | 50V | My |
| C709a,b | CQ0005T | 0.14uF | 50V | My |
| C710a,b | CQ1334 | 1uF | 50V | My |
| C711a,b | CQ2253F | 0.22uF | 50V | My |
| C712a,b | CQ1344 | 0.82uF | 50V | My |
| C713a,b | CQ1339 | 0.56uF | 50V | My |

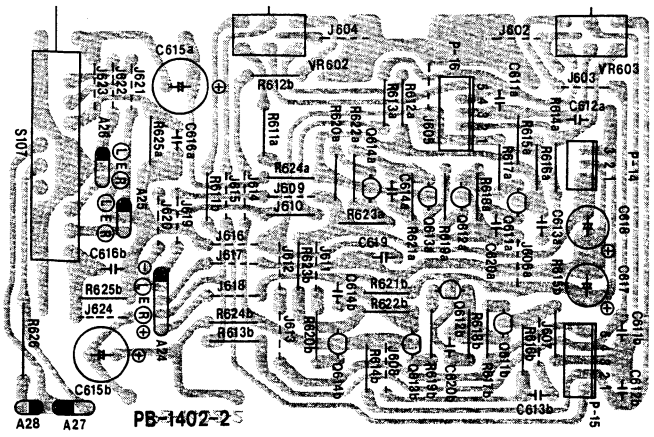
| Symbol No. | Stock No. | Description | | |
|---|---|---|---|---|
| C714a,b | CQ2257 | 0.39uF | 50V | My |
| C715a,b | CQ2253F | 0.22uF | 50V | My |
| C716a,b | CQ2251F | 0.15uF | 50V | My |
| C717a,b | CQ0006T | 0.082uF | 50V | My |
| C718a,b | CQ1319T | 0.033uF | 50V | My |
| C719a,b | CQ2253F | 0.22uF | 50V | My |
| C720a,b | CQ1334 | 1uF | 50V | My |
| C721a,b | CQ2253F | 0.22uF | 50V | My |
| C722a,b | CQ1344 | 0.82uF | 50V | My |
| C723a,b | CQ1339 | 0.56uF | 50V | My |
| C725a,b | CQ2251F | 0.15uF | 50V | My |
| C726a,b | CQ0006T | 0.082uF | 50V | My |
| C727a,b | CQ1319T | 0.033uF | 50V | My |
| (Resistor) | | | | |
| R701a,b | RK1001 | 1M | | Ru |
| R702a,b | RK1001 | 1M | | Ru |
| R703a,b | RK1001 | 1M | | Ru |

# PB1402-1 Parts List



| Symbol No. | Stock No. | Description |
|---|---|---|
| (Relay) | | |
| RY1 | AY1021 | VB12MC |
| RY2 | AY1021 | VB12MC |
| RY3 | AY0027 | FRL-644D12/2AS |
| (Transistor,FET) | | |
| Q901 | TR0029 | 2SC945 |
| Q902 | TR0029 | 2SC945 |
| Q903 | TR0043 | 2SA733 |
| Q904 | TR0029 | 2SC945 |
| Q905 | TR0008 | 2SA562 |
| Q907 | TR0029 | 2SC945 |
| Q908 | TR0029 | 2SC945 |
| Q909 | TR0361 | 2SC2878 |
| Q910 | TR0361 | 2SC2878 |
| Q911 | TR0361 | 2SC2878 |
| Q913 | TR0029 | 2SC945 |
| Q914 | TF0030 | 2SK117Y |
| Q916 | TR5012 | 2SD880 |
| Q917 | TR0361 | 2SC2878 |
| Q918 | TR0029 | 2SC945 |
| Q919 | TR0361 | 2SC2878 |
| (Diode) | | |
| D901 | TD0137 | S1VB10 |
| D902 | TD0002 | 1N4002 |
| D903 | TD0002 | 1N4002 |
| D904 | TD0227T | 1SS41 |
| D905 | TD0227T | 1SS41 |
| D906 | TD0227T | 1SS41 |
| D907 | TD0227T | 1SS41 |
| D908 | TD0002 | 1N4002 |
| D909 | TD0002 | 1N4002 |
| D910 | TD0002 | 1N4002 |
| (Zener Diode) | | |
| ZD901 | TD0044T | WZ052 |
| ZD902 | TD0024T | WZ081 |
| ZD903 | TD0044T | WZ052 |
| (Capacitor) | | |
| C901 | CE1735 | 470uF 25v E1 |
| C902 | CE1735 | 470uF 25V E1 |
| C903 | CE1722 | 220uF 16V E1 |
| C904 | CE1718 | 22uF 16V E1 |
| C905 | CE1722 | 220uF 16V E1 |
| C907 | CE1754T | 10uF 50V E1 |
| C908 | CE1754T | 10uF 50V E1 |
| C909 | CE1718 | 22uF 16V E1 |
| C910 | CE1751T | 2.2uF 50V E1 |
| C911 | CE1721T | 100uF 16V E1 |
| C912 | CE1722 | 220uF 16V E1 |
| (Resistor) | | |
| R901a,b | RB0404T | 22K Rd |
| R903 | RB0396T | 10K Rd |
| R904 | RB0394T | 8.2K Rd |
| R905 | RB0384T | 3.3K Rd |
| R906 | RB0438T | 560K Rd |
| R907 | RB0374T | 1.2K Rd |
| R908 | RB0396T | 10K Rd |
| R909 | RB0380T | 2.2K Rd |
| R910 | RB0372T | 1K Rd |
| R911 | RB0412T | 47K Rd |
| R912 | RS2746LA | 560 1W Rf |
| R913 | RB0412T | 47K Rd |
| R914 | RB0408T | 33K Rd |
| R915 | RB0396T | 10K Rd |
| R916 | RB0396T | 10K Rd |
| R917 | RB0388T | 4.7K Rd |
| R921 | RB0378T | 1.8K Rd |
| R922 | RB0420T | 100K Rd |
| R923 | RB0454 | 2.7M Rd |
| R924 | RB0394T | 8.2K Rd |
| R925 | RB0374T | 1.2K Rd |
| R926 | RB0420T | 100K Rd |
| R927 | RB0336T | 33 Rd |
| R928 | RB0392T | 6.8K Rd |
| R929 | RS1859 | 270 Rf |
| R930 | RS2503L | 18 1/2W Rf |
| R931 | RS2746LA | 560 1W Rf |
| R932a,b | RS2953L | 180 2W Rf |
| R933a,b | RS2953L | 180 2W Rf |
| | RB0408 | 33K Rd |
| | RB0380 | 2.2K Rd |
| | RB0458 | 3.9M Rd |

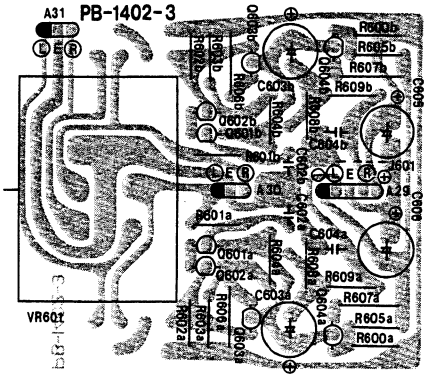
# PB1402-2 Parts List




| Symbol No. | Stock No. | Description |
|---|---|---|
| (Push Switch) | | |
| S107 | SP0263 | SUL122A (Tone In) |
| (Variable Resistor) | | |
| VR602 | RV0291 | 5KBx2 (Treble) |
| VR603 | RV0291 | 5KBx2 (Bass) |
| (Transistor,FET) | | |
| Q611a,b | TF0028 | 2SK170-BL Pair |
| Q612a,b | TR0198 | 2SC1815 |
| Q613a,b | TR0087 | 2SA1015 |
| Q614a,b | TR0236 | 2SC2229 |

| Symbol No. | Stock No. | Description | | |
|---|---|---|---|---|
| (Capacitor) | | | | |
| C611a,b | CQ0006T | 0.082uF | 50V | My |
| C612a,b | CQ0006T | 0.082uF | 50V | My |
| C613a,b | CM0068 | 100pF | 50V | Mi |
| C614a,b | CQ0016T | 0.01uF | 50V | My |
| C615a,b | CE1975 | 2.2uF | 50V | El |
| C616a,b | CM0068 | 100pF | 50V | Mi |
| C617 | CE1977 | 4.7uF | 50V | El |
| C618 | CE1977 | 4.7uF | 50V | El |
| C619 | CQ3063 | 47000pF | | Pp |
| | CK0145 | 0.022uF | 50V | Ce |
| (Resistor) | | | | |
| R611a,b | RB0368T | 680 | | Rd |
| R612a,b | RB0368T | 680 | | Rd |
| R613a,b | RB0380T | 2.2K | | Rd |
| R614a,b | RB0380T | 2.2K | | Rd |
| R615a,b | RB0348T | 100 | | Rd |
| R616a,b | RB0452T | 2.2M | | Rd |
| R617a,b | RB0356T | 220 | | Rd |
| R618a,b | RB0402T | 18K | | Rd |
| R619a,b | RB0358T | 270 | | Rd |
| R620a,b | RS1849 | 100 | | Rf |
| R621a,b | RB0404T | 22K | | Rd |
| R622a,b | RB0410T | 39K | | Rd |
| R623a,b | RB0374T | 1.2K | | Rd |
| R624a,b | RB0348T | 100 | | Rd |
| R625a,b | RB0432T | 330K | | Rd |
| R626 | RS2746LA | 560 | 1W | Rf |

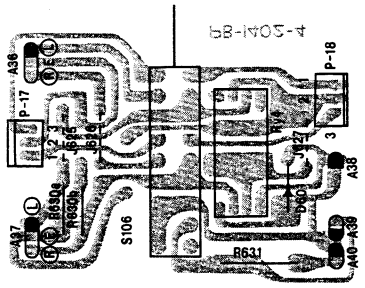
# PB1402-3 Parts List




| Symbol No. | Stock No. | Description |
|---|---|---|
| (Variable Resistor) | | |
| VR601 | RV0290 | 50Kx2 (Volume) |
| (Transistor,FET) | | |
| Q601a,b | TF0028 | 2SK170-BL Pair |
| Q602a,b | TR0198 | 2SC1815 |

| Symbol No. | Stock No. | Description | | |
|---|---|---|---|---|
| Q603a,b | TR0237 | 2SA949 | | |
| Q604a,b | TR0236 | 2SC2229 | | |
| (Capacitor) | | | | |
| C602a,b | CM0060 | 47uF | 50V | Mi |
| C603a,b | CE1978 | 10uF | 50V | El |
| C604a,b | CQ1401 | 1000pF | 50V | St |
| C605 | CE1977 | 4.7uF | 50V | El |
| C606 | CE1977 | 4.7uF | 50V | El |
| (Resistor) | | | | |
| R600a,b | RB0414T | 56K | | Rd |
| R601a,b | RB0380T | 2.2K | | Rd |
| R602a,b | RB0374T | 1.2K | | Rd |
| R603a,b | RB0432T | 330K | | Rd |
| R604a,b | RB0408T | 33K | | Rd |
| R605a,b | RB0374T | 1.2K | | Rd |
| R606a,b | RS1441 | 33 | 1/3W | Rf |
| R607a,b | RS1449 | 68 | 1/3W | Rf |
| R608a,b | RB0432T | 330K | | Rd |
| R609a,b | RB0344T | 68 | | Rd |

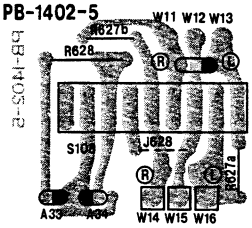
# PB1402-4 Parts List




PB-1402-4

| Symbol No. | Stock No. | Description |
|---|---|---|
| (Push Switch) | | |
| S106 | SP0268 | SUF12 (Phono Straight) |
| (Relay) | | |
| RY4 | AY0027 | FRL-644D12/2AS |
| (Diode) | | |
| D601 | TD0002 | 1N4002 |
| (Resistor) | | |
| R603a,b | RB0444T | 1M Rd |
| R631 | RS2746LA | 560 1W Rf |

# PB1402-5 Parts List




| Symbol No. | Stock No. | Description |
|---|---|---|
| (Puch Switch) | | |
| S108 | SP0266 | SUL121A (Signal Off) |
| (Resistor) | | |
| R627a,b | RB0414T | 56K Rd |
| R628 | RS2746LA | 560 1W Rf |

# PB1402-6 Parts List

| Symbol No. | Stock No. | Description |
|---|---|---|
| (LED) | | |
| D604 | TD0232 | EAA5534S org.(Signal Off) |

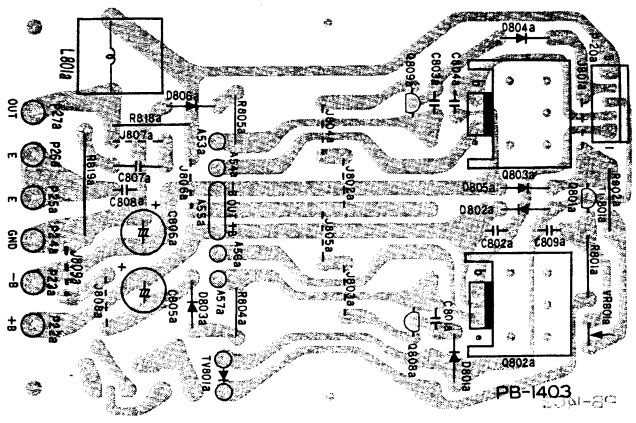
# PB1402-7 Parts List

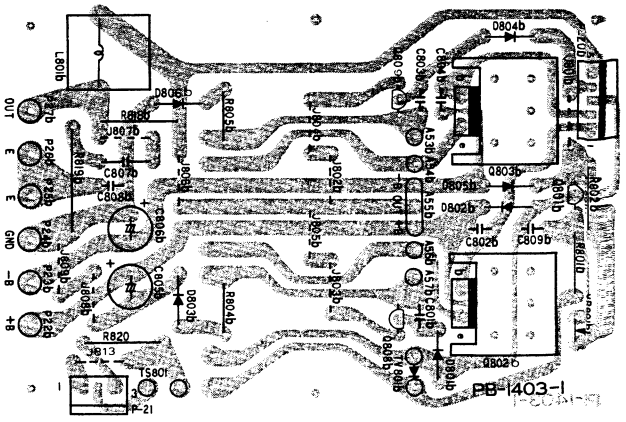
| Symbol No. | Stock No. | Description |
|---|---|---|
| (LED) | | |
| D603 | TD0232 | EAA5534S org.(Tone In) |

# PB1402-8 Parts List

| Symbol No. | STock No. | Description |
|---|---|---|
| (LED) | | |
| D602 | TD0233 | EBG5534S grn.(Phono Straight) |

# PB1403/1403-1 Parts List

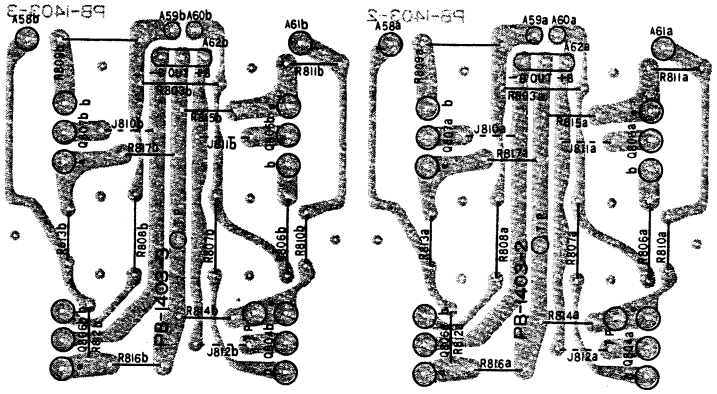


| Symbol No. | Stock No. | Description | | |
|---|---|---|---|---|
| (Choke Coil) | | | | |
| L801a,b | LA9430 | LUX9430 | | |
| (Transistor) | | | | |
| Q801a,b | TR0323 | 2SC1845 | | |
| Q802a,b | TR0242 | 2SC2336 | | |
| Q803a,b | TR0241 | 2SA1006 | | |
| Q808a,b | TR0198 | 2SC1815 | | |
| Q809a,b | TR0087 | 2SA1015 | | |
| (Semi-Fixed Resistor) | | | | |
| VR801a,b | RT0123 | CR29R 220B | | |
| (Capacitor) | | | | |
| C801a,b | CQ0026T | 0.001uF | 50V | My |
| C802a,b | CM0125 | 47pF | 500V | Mi |
| C803a,b | CQ0026T | 0.001uF | 50V | My |
| C804a,b | CM0125 | 47pF | 500V | Mi |
| C805a,b | CE1981 | 47uF | 50V | El |
| C806a,b | CE1981 | 47uF | 50V | El |
| C807a,b | CQ1047 | 0.022uF | 400V | My |

| Symbol No. | Stock No. | Description | | |
|---|---|---|---|---|
| (Diode) | | | | |
| D801a,b | TD0227 | 1SS41 | | |
| D802a,b | TD5025 | 1S2462 | | |
| D803a,b | TD0227 | 1SS41 | | |
| D804a,b | TD0227 | 1SS41 | | |
| D805a,b | TD5025 | 1S2462 | | |
| D806a,b | TD0227 | 1SS41 | | |
| (Varistor) | | | | |
| TY801a,b | TV0026 | STV-2H | | |
| (Thermistor) | | | | |
| R802a,b | TV0035 | TD5-C230 | | |
| (Resistor) | | | | |
| R801a,b | RS1456 | 820 | 1/3W | Rf |
| R804a,b | RB0394T | 8.2K | | Rd |
| R805a,b | RB0394T | 8.2K | | Rd |
| R818a,b | RS2709L | 10 | 1W | Rf |
| R819a,b | RS2949L | 33 | 2W | Rf |
| R820 | RS5035L | 1K | 1W | Rf |

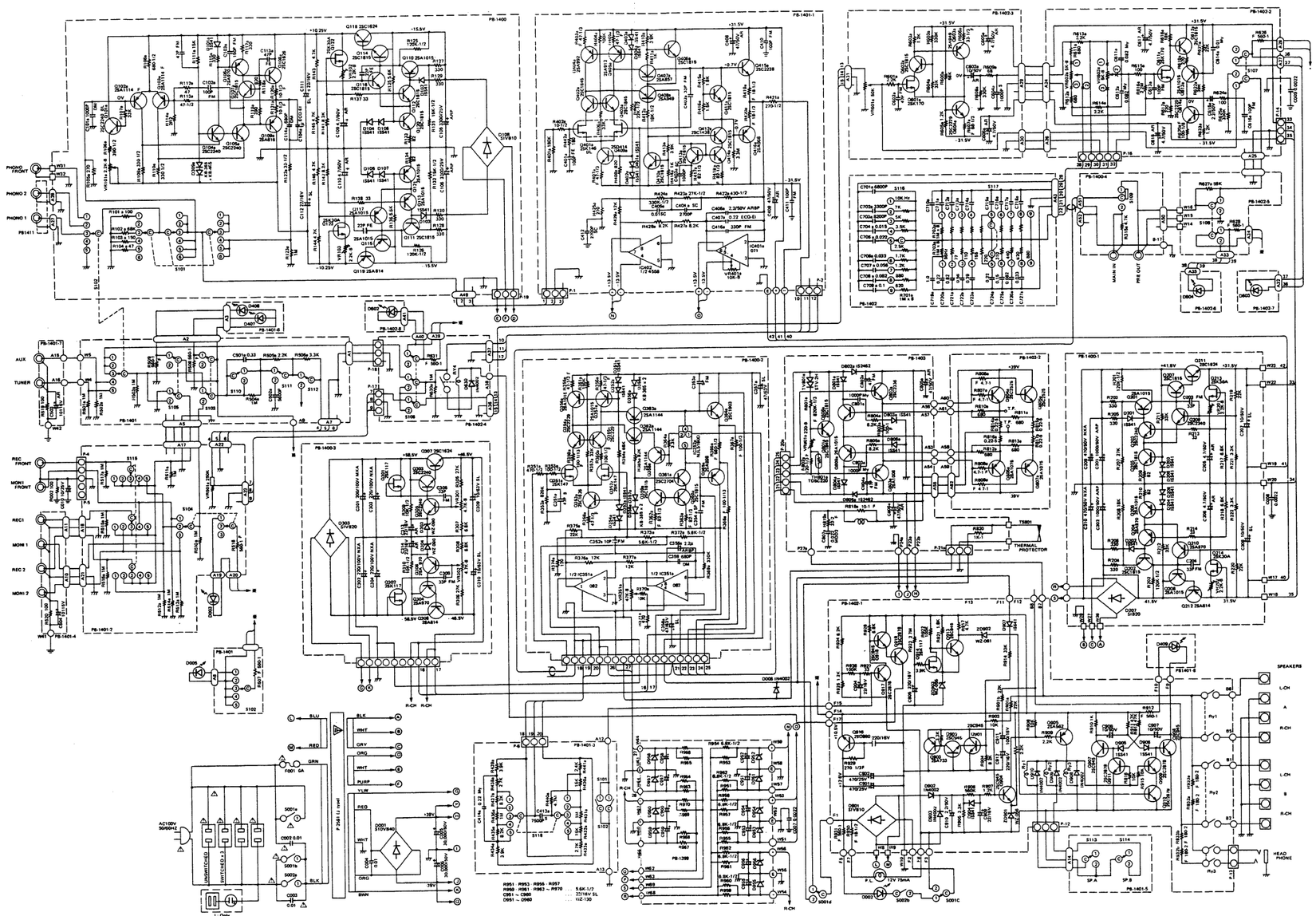
# PB1403-2,3 Parts List




| Symbol No. | Stock No. | Description | | |
|---|---|---|---|---|
| (Transistor) | | | | |
| Q804a,b | TR0272 | 2SC2525 | | |
| Q805a,b | TR0272 | 2SC2525 | | |
| Q806a,b | TR0271 | 2SA1075 | | |
| Q808a,b | TR0271 | 2SA1075 | | |
| (Resistor) | | | | |
| R803a,b | RS2717L | 100 | 1W | Rf |
| R806a,b | RS2696L | 4.7 | 1W | Rf |
| R807a,b | RS2696L | 4.7 | 1W | Rf |
| R808a,b | RS2696L | 4.7 | 1W | Rf |

| Symbol No. | Stock No. | Description | | |
|---|---|---|---|---|
| R809a,b | RS2696L | 4.7 | 1W | Rf |
| R810a,b | RB0368T | 680 | | Rd |
| R811a,b | RB0368T | 680 | | Rd |
| R812a,b | RB0368T | 680 | | Rd |
| R813a,b | RB0368T | 680 | | Rd |
| R814a,b | RG0094 | 0.22 | 5W | Rc |
| R815a,b | RG0094 | 0.22 | 5W | Rc |
| R816a,b | RG0094 | 0.22 | 5W | Rc |
| R817a,b | RG0094 | 0.22 | 5W | Rc |

# Schematic Diagram




S101: CARTRIDGE (OHMS)
1. 100
2. 100K } MM
3. 50K
4. 100
5. 40 } MC
6. 300

S102: FUNCTION
1. PHONO FRONT
2. PHONO 2.
3. PHONO 1.
4. AUX
5. TUNER

S103: MONITOR
1. OFF
2. ON

S104: TAPE
1. TAPE FRONT
2. TAPE 1.
3. TAPE 2.

S105: RECORDING
1. OFF
2. ON

S106: PHONO STRAIGHT
1. OFF
2. ON

S107: TONE IN
1. OFF
2. ON

S108: SIGNAL OFF
1. OFF
2. ON

S109: SIGNAL PROCESSING
1. OFF
2. ON

S110: SUBSONIC
1. OFF
2. ON

S111: HIGH CUT
1. OFF
2. ON

S112: MONO
1. OFF
2. ON

S113: SPEAKER A
1. OFF
2. ON

S114: SPEAKER B
1. OFF
2. ON

S115: TAPE DUBBING
1. 1 → 2
2. 2 → 1
3. SOURCE
4. FRONT → 1
5. 1 → FRONT

S116: TREBLE TURNOVER (Hz)
1. 10K
2. 7K
3. 5K
4. 3.5K
5. 2.5K
6. 1.7K
7. 1.2K
8. 880
9. 620

S117: BASS TURNOVER (Hz)
1. 55
2. 77
3. 110
4. 155
5. 220
6. 310
7. 440
8. 620
9. 880

S118: LINER EQUALIZER
1. DOWN TILT 2
2. DOWN TILT 1
3. FLAT
4. UP TILT 2
5. UP TILT 1

S001: POWER SW.
S002: PREHEAT SW.

VR501: BALANCE CONT.
VR601: VOLUME CONT.
VR602: TREBLE CONT.
VR603: BASS CONT.

D002: PREHEAT LED.
D003: TAPE FRONT LED
D004: HEATUP LED
D005: PHONO FRONT LED
D407: MONITOR LED
D408: RECORDING LED
D602: PHONO STRAIGHT LED
D603: TONE IN LED
D604: SIGNAL OFF LED

NOTE.
1) UNLESS OTHERWISE SPECIFIED ALL RESISTORS IN OHM 1/4 WATT. ALL CAPACITORS ARE IN MICRO FARAD.
2) TRANSISTORS AND DIODES MAY BE REPLACED WITH ANY TYPE HAVING COMPARABLE RATINGS.
3) DUE TO CONTINUED IMPROVEMENTS LUX RESERVE THE RIGHT TO ALTER THE CIRCUIT OR SPECIFICATION.

L-550

# Miscellaneous Parts List

| Symbol No. | Stock No. | Description | Remarks |
|---|---|---|---|
| (Switch) | | | |
| S001 | SP0080 | SDU4P TV-5 | (Power SW) |
| S002 | SP0090 | SDG5P502 5A | (Preheating) |
| (Lamp) | | | |
| P.L | AL0070 | 12V75mA | |
| (Diode) | | | |
| D001 | TD0182 | S1VB40F | |
| D002 | TD0232 | EAA5534S LED, Orenge | (Preheating) |
| D003 | TD0233 | EBG5534S LED, Green | (Tape-Front Monitor) |
| D005 | TD0233 | EBG5534S LED, Green | (Phono-Front) |
| D006 | TD0002 | 1N4002 | |
| (Fuse) | | | |
| F001 | BF0118 | 4A | (EG,EK) |
| | BF0213 | 4A(T) | (AG,AK) |
| | BF0400 | 6A | (AZ,EZ,J) |
| (Capacitor) | | | |
| C001 | CU0081 | 0.01uF 400V My | |
| | CU0077 | 0.01uF 120V My | (J) |
| C002 | CU0081 | 0.01uF 400V My | |
| | CU0077 | 0.01uF 120V My | (J) |
| C003 | CU0081 | 0.01uF 400V My | |
| | CU0077 | 0.01uF 120V My | (J) |
| C004 | CU0077 | 0.01uF 120V My | |
| C005 | CE1454 | 30,000uF 50V El | |
| C006 | CE1454 | 30,000uF 50V El | |
| C011 | CE0086 | 10uF 25V AR El | |
| (Resistor) | | | |
| R001 | RD2662 | 2.2M 1/2W Rd | (J) |
| R003 | RB0348 | 100 1/4W Rd | |

# Destination's Parts List

| Description | AZ,EZ (120V) Canada & Others | AK (220V) Europe & Others | EK (220V) Europe & Others | AG (240V) England & Oceania | EG (240V) England & Oceania | J (100V) Japan |
|---|---|---|---|---|---|---|
| Rear Panel | UC1209-2 | UC1209-3 | UC1209-3 | UC1209-2 | UC1209-2 | UC1209-1 |
| AC Cord | BK0018 | BK0022 | BK0022 | BK0023 | BK0023 | BK0048 |
| Stopper,Cord | BU0033 | BU0033 | BU0033 | BU0039 | BU0039 | BU0080 |
| Trans,Power | PT2593 | PT2593 | PT2593 | PT2593 | PT2593 | PT2591 |
| Fuse,(Primary) | BF0400 (6A) | BF0213 (4AT) | BF0118 (4A) | BF0213 (4AT) | BF0118 (4A) | BF0400 (6A) |
| AC Outlet | AC0010 | AC0010 | AC0010 | AC0010 | AC0010 | AC0055 |
| Cover,Outlet | Non Use | UJ1107 | UJ1107 | Non Use | Non Use | Non Use |
| Voltage Selector Plug: | AC0014 | AC0014 | AC0014 | AC0014 | AC0014 | Non Use |
| Socket: | AC0054 | AC0054 | AC0054 | AC0054 | AC0054 | Non Use |

Remarks
Capacitor: El...Electrolytic, Ce...Ceramic, ST...Styrol, Mi...Mica,
My...Mylar, Pp...Polypropylene, Fi...Film

Resistor: Rd...Carbon, Rf...Flame Proof, Rc...Cement

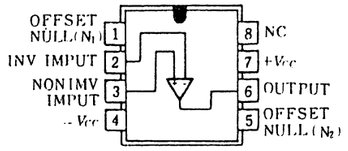
All Resistors are in ohm 1/4 Watt.



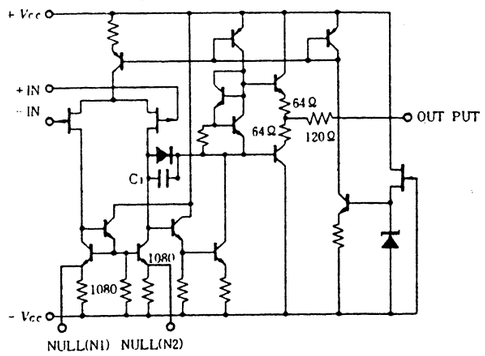
# IC Handling Guide

## TL-071CP (IC401a, b : Stock NO. TC0197)

(Top View)

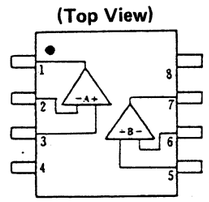



Equivalent Circuit (1/2)



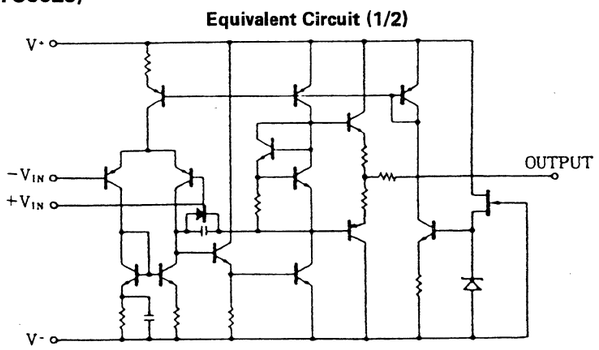

## NJM4558D-D (IC402 : Stock NO. TC0025)

(Top View)



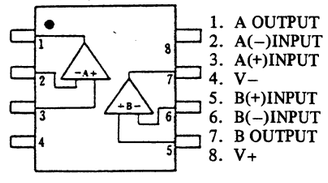
1. A OUTPUT
2. A(–)INPUT
3. A(+)INPUT
4. V–
5. B(+)INPUT
6. B(–)INPUT
7. B OUTPUT
8. V+

Equivalent Circuit (1/2)



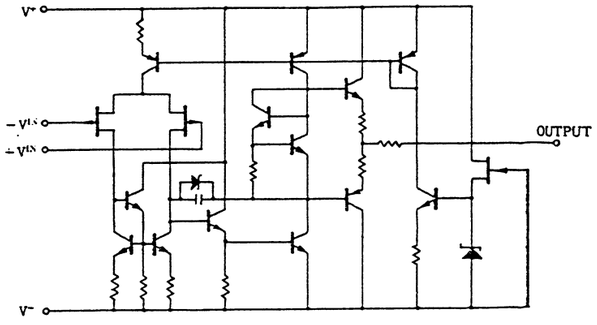

## NJM082 (IC351a, b : Stock NO. 5040)

(Top View)



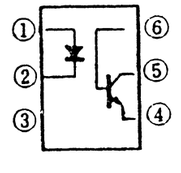
1. A OUTPUT
2. A(–)INPUT
3. A(+)INPUT
4. V–
5. B(+)INPUT
6. B(–)INPUT
7. B OUTPUT
8. V+

Equivalent Circuit (1/2)




## NJL5160 (IC352a, b : Stock NO. TC0199)

(Top View)



1. LED, A(Anode)
2. LED, K(Cathode)
3. NC
4. Photo TR, E
5. Photo TR, C
6. Photo TR, B

# Specifications



| | |
|---|---|
| Power Output: | 50W + 50W Pure class "A" (8 ohms, both ch. dirven 20Hz - 20kHz) |
| T.H.D.: | no more than 0.005% (8 ohms, -3dB, 20Hz - 20kHz) |
| Rated I.M.: | no more than 0.005% (8 ohms, -3dB, 60Hz:7kHz=4:1) |
| Input Sensitivity: | phono (MM): 1.6mV<br>phono (MC): 80uV<br>tuner: 220mV<br>aux: 220mV<br>main in: 220mV |
| Input Impedance: | phono (MM): 50 kohms, 100 kohms, 100 ohms<br>phono (MC): 100 ohms, 40 ohms, 300 ohms<br>tuner: 33 kohms<br>aux: 33 kohms<br>main in: 47 kohms |
| Signal-to-Noise Ratio: (IHF-A weighted) | phono (MM): better than 84dB(input short-circuited)<br>phono (MC): better than 67dB(250uV input)<br>tuner: better than 110dB(input short-circuited)<br>aux: better than 110dB(input short-circuited)<br>main in: better than 110dB(input short-circuited) |
| Frequency Response: | phono(MM,MC): 20Hz - 20,000Hz (within ±0.2dB)<br>tuner, aux: 10Hz - 100,000Hz(within -1dB)<br>main in: 10Hz - 100,000Hz(within -1dB) |
| Tone Control: | maximum variable amount: ±9dB<br>Bass Turnover Frequencies: 55Hz,77Hz,110Hz,155Hz, 220Hz,310Hz,440Hz,620Hz 880Hz<br>Treble Turnover Frequencies: 620Hz,880Hz,1.2kHz,1.7kHz, 2.5kHz,3.5kHz,5kHz,7kHz, 10kHz |
| Preamplifier Output: | 220mV |
| Additional Features: | Subsonic Filter (15Hz), High Cut Filter (9kHz), Pre-Heating Switch, Warm-Up Indicator, Phono Straight Switch, Signal OFF Switch, Linear Equalizer, Tone-In Switch, REC Switch, Tape Monitor Switch(tape-1, tape-2, tape-front), Tape Dubbing Switch(1 ▶ 2, 2 ▶ 1, 1 ▶ front front ▶ 1),Speaker Selector (A,B), Headphone Jack,etc. |
| Dimensions: | 453(W) x 460(D) x 174(H)mm<br>(17.8" x 18.1" x 6.9") |
| Weight: | Net 18kgs (39.6 lbs.) |

Specifications and appearance design subject to change without notice.

L-550

LUX CORPORATION, JAPAN

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